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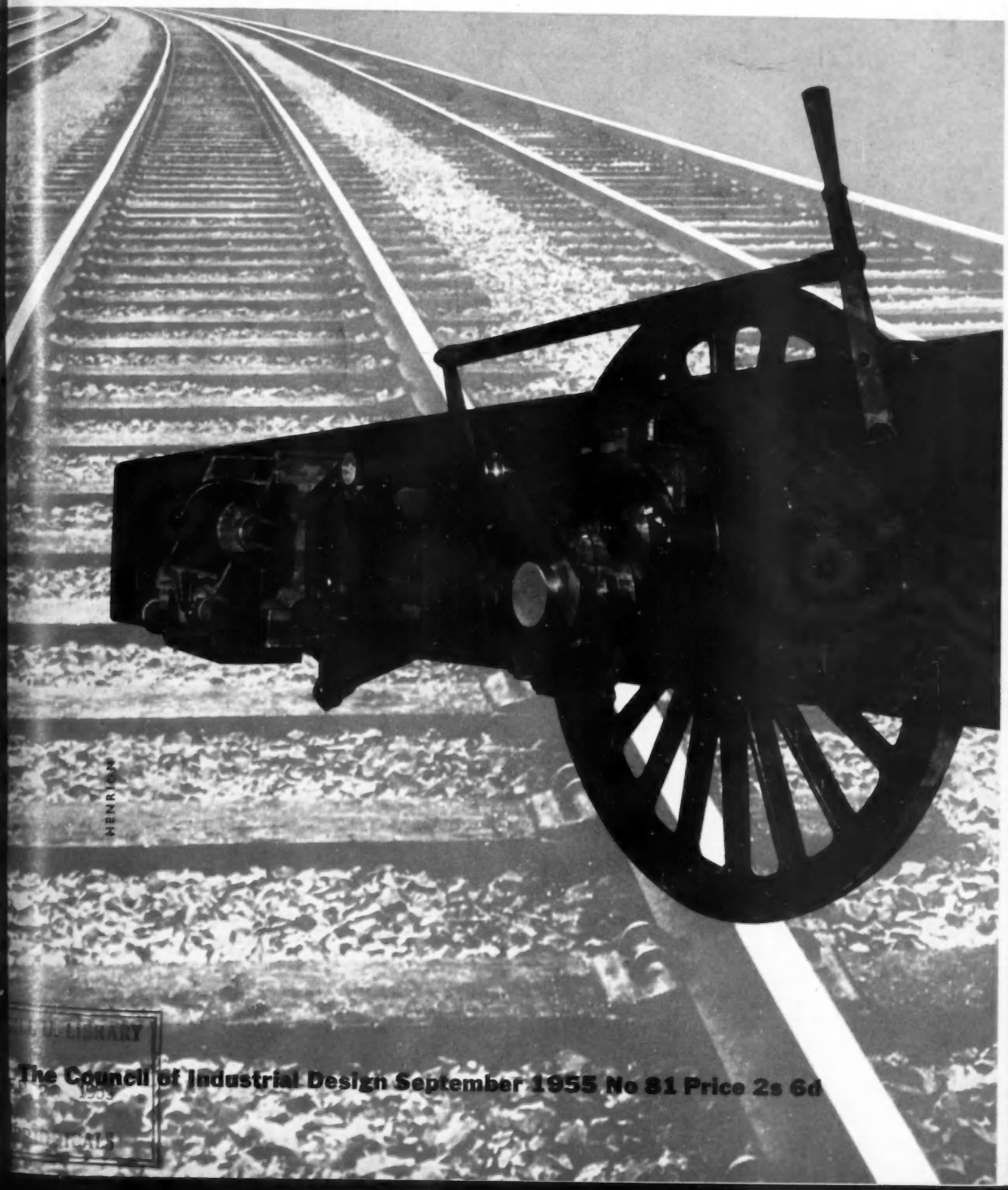
# Design

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SEPTEMBER 1955

## RAILWAYS

**A special issue compiled and arranged by John E. Blake**

SYMPOSIUM 10

THE SHAPE OF THE TRAIN
*Hamilton Ellis* 16

INSIDE THE TRAIN
*Hamilton Ellis* 24

STATION ARCHITECTURE
*J. M. Richards* 32

SURVEY OF STATIONS 34

PUBLICITY
*Anthony Adams* 42

FURNITURE SURVEY: 7
Occasional furniture
*A. Gardner-Medwin* 47

NEWS 51

BOOKS 55

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# Design

## *Design policy needed now*

FEW PEOPLE CAN BE MORE CONSCIOUS of the decline in the prestige of British railways over the last 50 years than those responsible for creating the plan for the modernisation and re-equipment of the railways in this country. The need to recapture the public's enthusiasm for railway travel is fully realised by the British Transport Commission, whose chairman, General Sir Brian Robertson, in his announcement of the plan, stated: "Both the diesel and the electric locomotive lack the glamour which surrounds the mighty steam engine . . . we are honestly seeking a means to avoid losing all the romance which is attached to this great iron horse."

The problem has been clearly stated, yet the hesitancy over the means of solving it is an ominous reminder of past attempts at popularising the railways – tavern cars and suchlike. Statements by Sir Reginald Wilson (page 44) and J. C. L. Train (page 15) suggest, however, that the British Transport Commission is formulating a more progressive approach to these problems. Yet there has been little indication from recent developments that it will wholeheartedly embrace a modern conception of transport design, as the aircraft and motor industries have so emphatically done (and flourished because of it). Something that looks like a tin box on wheels, as the locomotives do on the newly electrified Manchester–Sheffield line, can hardly be expected to appeal to imaginations conditioned by the appearance of a 'Viscount' or the latest Ford cars. Nor can the decision to adopt a dreary black as the standard 'colour' for all new locomotives be regarded in any way as a serious attempt "to avoid losing all the romance" of steam trains. Of the few new stations built since the war, that at Grays in Essex is perhaps the only example which reflects a high standard of modern architectural design; the most exciting project is the one for Banbury.

In this special issue we have therefore put forward an urgent plea for the establishment of a progressive and co-ordinated design policy for the railways which the modernisation plan has, for the first time, made possible. To endorse our views we have illustrated the latest developments from abroad and have shown how design concepts there have kept pace with advanced technical performances. We have compared these with our own standards and have invited comments from a number of distinguished persons. But how such a policy can be achieved within the present regional system is a question that requires careful thought. The difficulties it presents are obvious though they are not, we hope, insuperable.

RAILWAYS

**We should like** to acknowledge the help in preparing this issue from J. H. Brebner, Public Relations Advisor, D. S. M. Barrie, Public Relations Officer, and C. Barman, Publicity Officer, of the British Transport Commission staff; the Regional offices of British Railways; the contributors to our Symposium; and all those railway companies and manufacturers at home and abroad who supplied valuable information and pictures.

*In our belief that good modern design must play a vital part in the modernisation of British Railways if the aims of the plan are to be achieved, we have looked for support among distinguished personalities who are either responsible for some of the most advanced developments abroad or are intimately concerned with problems arising out of railway travel in this country. We therefore asked questions of the leading figures in seven organisations, and their replies, printed below, build up a convincing picture of the importance which they attach to the subjects we are considering. Finally, we sought assurance from the British Transport Commission that it will give careful thought to all those aspects of design which are affected by the modernisation plan.*

# SYMPOSIUM

## Sir Arthur Morse

*Chairman British Travel and Holidays Association*

**Q** *Do you feel that the prestige of Great Britain is adversely affected by present design standards on our railways?*

**A** Yes. The hundreds of thousands of oversea visitors we entertain every year either come from European countries, where more thought has been given to railway design matters, or, if they come from further afield, they almost certainly go to the Continent before or after visiting this country. The comparisons our visitors make are all too often unflattering to Britain.

**Q** *What are the points which are most criticised by foreign travellers, and where, from the point of view of your Association, is improvement most urgently required?*

*Sir Arthur Morse*

**A** Dirt and shabbiness are the chief causes of the complaints made by oversea visitors about our railways. Much criticism is levelled at our gloomy, antiquated stations and unattractive refreshment rooms. I know that some of our great termini retain a certain charm in their design for connoisseurs of Victorian architecture, but this charm is lost upon the average traveller, who is exasperated by the inconvenience he suffers and is depressed by the drabness, the squalor, and the all-pervading gloom.

I should like to see stations designed to suit the convenience of those who use them. Designs should be based upon a close study of the problems of passenger handling, as has been done in the new buildings at London Airport. Stations should be spacious, airy, and bright. Above all, they should be cheerful places. I advocate a bold use of colour, as it has a heartening effect upon the traveller, and in carriages and waiting-rooms I want to see attractive décors employing the best British materials and textiles. . . . And may I make a plea for plenty of well-placed direction indicators, all in plain, legible lettering?

## F. Q. den Hollander

*President Netherlands Railways*

**Q** *The rebuilding of the Dutch railways since the war is a remarkable achievement, the new Dutch trains providing an excellent example of simple, pleasing design. What do you feel are the basic requirements for the establishment of a progressive design policy for the railways?*

*F. Q. den Hollander*

**A** Railways are the means of daily transport for millions of people. To everybody railways can bring cheer; to achieve this the front of the stations, colours, lights and interiors must be pleasing and the trains themselves must gleam outside, be well groomed inside, both in seating, heating and lighting, and move noiselessly, offering a good view of the landscape.

This is the ideal of the manager for his customers – the question, however, is just how to achieve it. . . . Railways had a prosperous life in the nineteenth century, misleading themselves thereafter in believing in their old-established techniques, leaving the modern design to their competitors, road and air. . . . There is a strong need for railways, and complete modernisation has been started now in all countries.

Passenger, parcels and goods stations are being reconstructed and replaced – the era of the 'castle' and 'cathedral' type has gone. Experienced architects must have a free hand in design and layout to fit into the surroundings.

Ticket-buying should become a pleasure; flowers, cigarettes, papers, chocolate will be available in attractive windows, with advertisements in bright colours. Cosy waiting-rooms with good catering should offer a place for a short rest. Platforms: clean, fresh, well kept and, in the evening, brightly lighted, will lead passengers to trains of new design.

The main element in all these radical changes will be the replacement of steam, dirty as it is, by electric or diesel traction. Only in doing this can railways win back their dominant place in the transport field.

## F. G. Gurley

*President Atchison, Topeka and Santa Fe Railway System*

**Q** *The comfort and luxury of America's most modern trains are well known. Can you say from your experience how far an up-to-date design policy can make the railways economically successful in the face of growing competition from new forms of transport on land and in the air?*

**A** Practical experience in operation has indicated to Santa Fe's management that one of the keys to economically successful competition with other forms of transportation fits the lock of design. It is axiomatic that increased capacity per car and decreased cost of maintenance of equipment will result in more economical operation.

Proof of Santa Fe's belief in this formula is evidenced by its recent order of 35 'Hi-Level' chair cars, six diners and six dome cars, which in mid-1956 will be placed in service on 'El Capitan', the all-coach streamliner between Chicago and Los Angeles. Through the elimination of vestibules by this double-level arrangement, the new 'El Capitan' will carry 484 passengers in seven cars as compared with a total of 434 passengers in ten conventional-type chair cars presently in use on 'El Capitan'. This results in an overall reduction in maintenance and upkeep because of the lesser number of units in service.

It has become increasingly evident that the trend in rail passenger business has been toward chair car travel. In this striking new equipment, which is 15½ ft in height or 2 ft higher than conventiona

*F. G. Gurley*

American equipment, passengers will ride in the upper level, 8 ft above the rails or 4 ft higher than the floor of a regular chair car. Patrons will have a panoramic view of scenery through spacious windows from comfortable reclining seats and will enjoy a ride with less noise and vibration, another development in Santa Fe's long-range programme toward better riding qualities through improved car trucks. The new 'El Capitan' will be decorated throughout in the warm colours of the Indian south-west and all cars will be equipped with public address systems carrying recorded music, radio programmes and train announcements.

The order for 'Hi-Level' equipment reverses somewhat the recent trend of eastern carriers to order the low-slung or 'Talgo'-type equipment. It should be borne in mind that the fundamental difference in operation between eastern and western railroads is one of distance. Santa Fe is convinced that the ease, comfort and relaxation of its passengers cannot be served on a trip exceeding 2,000 miles in low-slung tubular equipment. Space allotment in this type of equipment is necessarily cramped and completely unsuitable for runs of great distance. A longer journey would require dining-car, lounge and rest-room facilities which would not be needed on shorter runs.

In consideration of the above information, we would be remiss were we not to give due credit to manufacturers and railways suppliers who have worked closely with us in the development and refinement of our modern equipment.

## Robert Spark

*Experienced traveller, Editor 'European Railways'*

**Q** *What are the main features of foreign railways systems which you would like to see adopted in this country ?*

*Robert Spark*

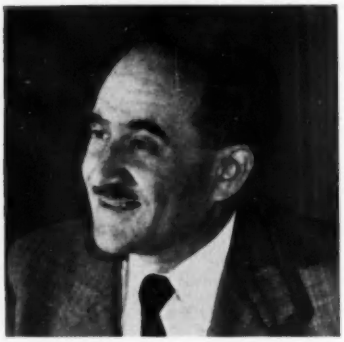
**A** The British passenger suffers – as far as his railway coach is concerned – from monotony. I should like to see greater flexibility in interior layout and design, getting away from our 'compartment' complex. Among other things, the introduction of reclining seats on long-distance trains would be welcome. These are common in the U S A and are gradually making their appearance in Europe. Next, lighter colours for interior decoration with better-designed and matching components, such as baggage racks, door handles, ash-trays and so on. An example of good taste in this direction is found on the Swiss light-weight coaches. I would also like to see the introduction – at least on main-line services – of air conditioning. It is vastly superior to the present alternatives of stuffy heat or draughts and dirt. Then there are the 'accessories' to travel comfort: better sound-insulation and draught-proofing, drinking-water in every coach (the Swedes provide it), coat hooks and hangers in the corridors (the Danes do it) and a separate space for heavy baggage (which can be found in a few British coaches).

Finally, a plea for just a few trains that are superior to the rest – trains that are distinctive inside and out and which have been designed as a single entity, trains that you would want to travel on, like Santa Fe's 'Super Chief', Germany's 'Senator' or Canadian Pacific's 'Canadian'.

## Louis Armand

*President French National Railways*

**Q** *The recent record-breaking run of the 'C C' electric locomotives which reached a speed of over 200 mph has focussed world attention on French Railways. Can you describe your approach to design in this machine, which is both technically advanced and graceful in appearance?*



*Louis Armand*

**A** In some activities, among which architecture is an excellent example, men skilled in the technical arts have known for centuries how to associate the beautiful with the useful and the necessary. This is not true however of those whose task it is to impart movement to inanimate objects, to give them as it were a character of their own. Often their achievements – particularly during the nineteenth century – had at first the appearance of 'fiery monsters' . . . and later . . . magnificent symbols of power.

A fresh approach to the problem is being made possible by new developments. Without aesthetic value in themselves, electric and diesel engines together with their accessory equipment are hidden away inside the locomotive, no longer a monster, but tamed, to which man can give whatever form he will. This is the business of the designer who, to crown his work, can combine beauty with efficiency. But to enable the railways to go further and with greater confidence along this path of progress it is very desirable that a discriminating public should be made aware of the designers' efforts and be able to assist and guide them by expressing its views, its commendations and its criticisms.

## A Representative

*of the Locomotive Manufacturers' Association of Great Britain*

**Q** *To what extent do you feel that the modern appearance of diesel and electric locomotives and railcars produced by the members of your Association will help to raise the prestige of railway travel in the eyes of the British public?*

**A** Apart from many of the essential considerations entailed in providing diesel and electric locomotives which will quickly improve the efficiency of the railways, the question of the appearance of this new fleet will undoubtedly be of real interest to the travelling public. The diesel and electric locomotive designers can now broadly follow an aerodynamic outline, and being no longer restricted by such large single units as the boiler, have more freedom in the shapes which they can develop. In addition, as these locomotives can be made clean and cool, colour can be more fully utilised to enhance design features and to establish styles which could embrace the entire train.

During the past few years, oversea railways have been operating many diesel and electric locomotives supplied by the British locomotive industry and the modern designs which have been produced are a testimony to the outstanding ability of the industry's designers to provide locomotives which in no way attempt to emulate the appearance of the steam locomotive but advance a new form which will undoubtedly acquire a character of its own.

In all 2,500 main-line diesel locomotives are to be provided under the modernisation programme together with 1,100 electric locomotives, quite apart from railcars and diesel shunters. Having regard to its experience and achievements already gained in this field, the British locomotive industry, whose productions have been almost entirely confined to the export market, is without doubt completely competent and ready to provide fine locomotives for the British railway system.

## David R. Lamb

*Chairman and Managing Editor of 'Modern Transport'*

**Q** *From your experience of modern transport systems in many parts of the world, what do you believe are the basic requirements on which a progressive and co-ordinated design policy for British Railways could be founded?*

*David R. Lamb*

**A** Many people will regret the passing of the steam locomotive whose belching excrescence makes of it a living thing of power and romance. But the introduction of cleaner methods of haulage, new rolling stock and re-modelled stations offers an opportunity not only for greater operating efficiency but also for carefully thought-out design – and design, no less than speedier and more punctual trains, is necessary if public estimation is to be fully regained. European railways, blessed now and in the past with more generous financial resources, have characteristics very similar to those in this country, and many lessons can be learnt from them.

The great need is to ensure that in this matter of design there shall be central, skilled and tasteful direction. The new organisation introduced by the British Transport Commission last January provides for the management of British Railways to be decentralised to area boards but reserves certain matters for direct control by the Commission. These include "the design, manufacture, standardisation and maintenance of locomotives, rolling-stock, permanent way and signalling". No mention of stations which, in their outward appearance and appurtenances and in the arrangement of facilities in the way of circulating areas, booking-halls, dining-, refreshment- and waiting-rooms, bookstalls and kiosks, afford the widest possible field for tasteful and functional design. Let us hope that the Commission's control and discretion will extend to all such phases as these for, however artistically sympathetic the area boards and their managements, unified policy and the highest standards of design and execution are essential if the shortcomings of the past are to be avoided in the future.

## J. C. L. Train

*Member British Transport Commission*

**Q** *Can you briefly explain the British Transport Commission's approach to design under the modernisation plan and outline the chief ways in which you believe that the highest standard of modern appearance can be achieved?*

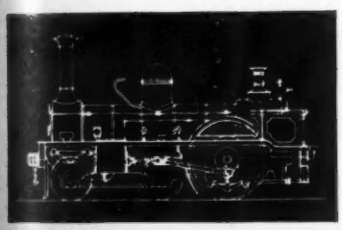
*J. C. L. Train*

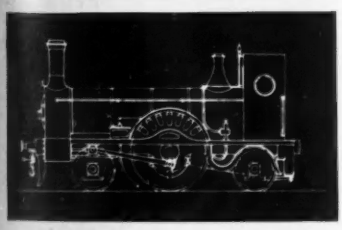
**A** The British Transport Commission's 'approach to design' under the modernisation plan may be briefly expressed as a full recognition both of the appeal which symmetry of proportion and smoothness of line make to people generally, and of our traditional obligation, as the country which gave railways to the world, to maintain the highest obtainable standard in all we plan to do. It is perhaps significant that in the membership of our working parties dealing with the future designs of rolling-stock, we include a Royal Designer for Industry and an architect of recognised professional reputation, just as an architect with distinguished oversea as well as British qualifications is helping us with current and future designs for stations and other buildings.

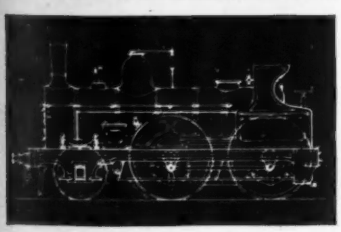
Certainly, therefore, we are giving full weight to aesthetic and harmonic considerations. But it is also essential to point out that such considerations must be related also to the practicality of British railway conditions. The British Transport Commission accepts the fact that design plays an all important part in attracting that balance of patronage which may well be bestowed elsewhere.

# The shape of the train

HAMILTON ELLIS







These drawings of early British locomotives form part of the retrospective exhibition which can be seen at the Shareholders Hall, Euston Station.

**The cover** shows a model of the original link motion developed by Robert Stephenson and still in use on many British steam locomotives. This model is also included in the exhibition.

*Canadian National Railways diesel train in the Rockies.*

STYLES IN THE DESIGN of Victorian steam railway trains were partly traditional and partly unconscious. The carriages were traditional, having evolved from existing road vehicles which had a pure Regency style imposed on an older base. The locomotive, however, had grown from a form of industrial machinery. That such handsome results were achieved, on some railways, was due to the fact that a really good engineer was incapable of producing anything unbalanced or clumsy, and that tradition was sufficiently respected to prevent old styles from becoming debased. There was no attempt to make engine and vehicles into a related whole. By association and refinement they belonged. They became a train, just as a coach and horses became an equipage.

Changes in motive power, in public preference, in economic conditions, are in our time affecting the shape and the nature of the railway transport system. It is now possible, indeed desirable, for the train to be considered as an ordered unit. The new locomotive – electric, diesel-electric, gas-turbine, or conceivably steam with a nuclear generator instead of boiler – can at last be made visually a part of the whole in a way formerly out of the question. Recent study of the mechanics and dynamics of the railway vehicle are resulting in the carriage, like the engine, radically changing its shape and even its basic principles, apart from the essential one of running on rails.

Reasons for past, present and future forms should not be disregarded. The high-riding coach on bogies, still the universal British type, had its origins in the U S A before 1850. The reason for its pivoted bogies was that they were the only things capable of running on the rough American tracks of those days without derailment. Much later they came to England, where tracks were more solid, in the cause of steadiness and comfort. Then there is the matter of weight, which is much greater in normal American coaches than ours. A heavy coach, it was considered, protected its passengers – at the expense of others – when in collision. So they became heavier and heavier. Standardisation brought about an 'as-you-were'. The derailment at Chatsworth, Ohio, in 1887, killed 82 passengers in

wooden Pullmans. That at Woodbridge, New Jersey, in 1951, killed 85 in a steel electric train. The virtue of enormous weights is thus exploded. It is an extremely expensive and doubtful virtue in terms of material and fuel.

To everybody's advantage, a train of light-weight cars, with a lowered centre of gravity, needs less power; that is a smaller and lighter locomotive to take it over varying gradients at much higher speed. Only by decreased costs and by providing, with safety, something much faster and more comfortable than other surface transport, can the long-distance passenger train survive. But thus improved, there are grounds for believing that its use will be increased.

In a world of motors and aircraft, the train's retention and renaissance are needed, if only for dealing with heavy mass movement. With light weights, really good permanent way, and most important, recent advances in springing and suspension, there is no reason why the railway coach should not revert from twelve or eight to four wheels, unless, indeed, the future holds something for pneumatic tyres on the rail, as in the French 'Micheline'. There, multi-wheel vehicles must be used as a safeguard against bursts. In a permanently coupled articulated train, several bodies can be reduced even to one axle each, frames being pivoted to their predecessors.

This is the principle of the Spanish 'Talgo' train, an original inspiration of Colonel Goicoechea. Following the first crude model, two 'Talgo' trains have been built for Spanish National Railways by the American Car and Foundry Co. Two more are going to American railway companies and two have appeared in Germany. A three-body 'Talgo' unit runs on four axles. Flush diaphragms connect the bodies, and inside the effect is that of a single long flexible coach. Somewhat similar is the Pullman Standard design known as 'Train X'. Of this also two examples are being built in

**The shape of the train**

*continued*

## locomotives

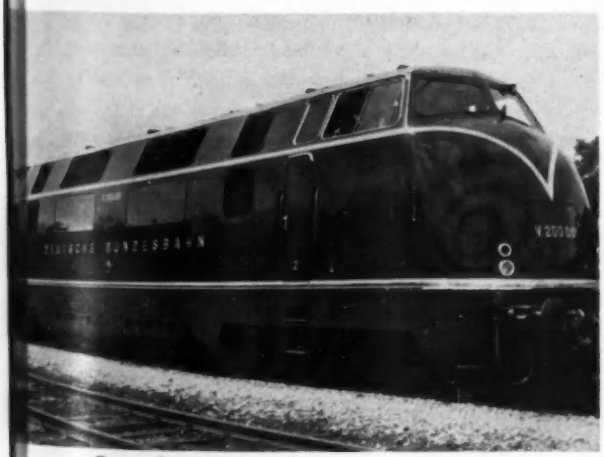
Bonnet ends and high cabs are characteristic features of the large Canadian National diesel-electric locomotive, **1**, and the German diesel, **5**. The French electric locomotive, **4**, is an outstanding example of clean modern design, perhaps without peer in the world where heavy locomotives are concerned. The British Railways electric locomotive, **3**, lacks any feeling for design with its ugly unrelated cab and weak waist line. It is black, and in service often dirty. The French engine is in two shades of green. The English Electric diesel for British Railways **2**, is more unified but is black like a hearse. The Canadian double unit, **1**, is typically North American and can be seen all the way from Miami to Prince Rupert, with much the same restless decoration in front. The German engine is a well integrated design, but ponderously *echtdeutsch*. The project for a diesel electric locomotive by the British Thomson-Houston Co Ltd, **6**, consultant designers Allen-Bowden Ltd, suggests that British industry is capable of producing designs of far greater merit than those at present in service on our railways.

**1** *Canadian National Railways diesel.*

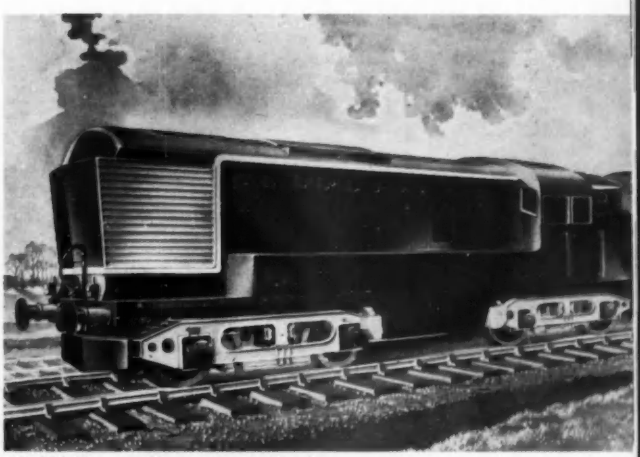
2 *British Railways diesel-electric.*

3 *British Railways electric, Manchester - Sheffield line.*

4 *French National Railways electric.*



5 *German Federal Railway diesel.*



6 *British Thomson-Houston Co diesel project.*

## The shape of the train

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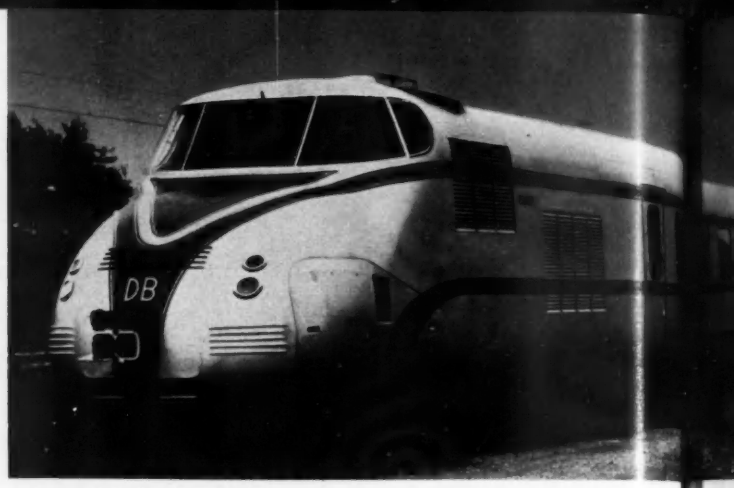
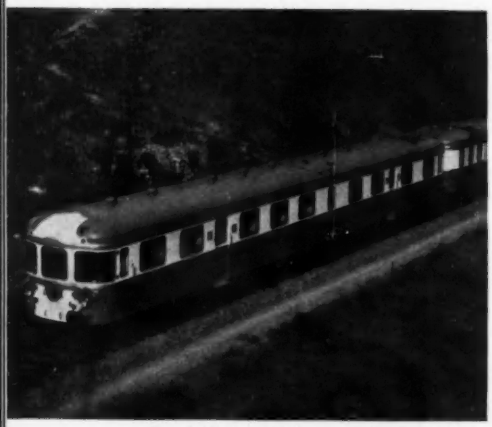
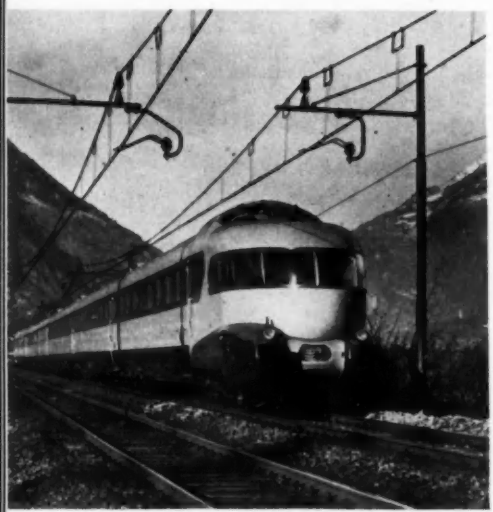



9 *German Federal Railway 'Talgo' type 'Senator'.*



7 *French National Railways multiple-unit diesel.*

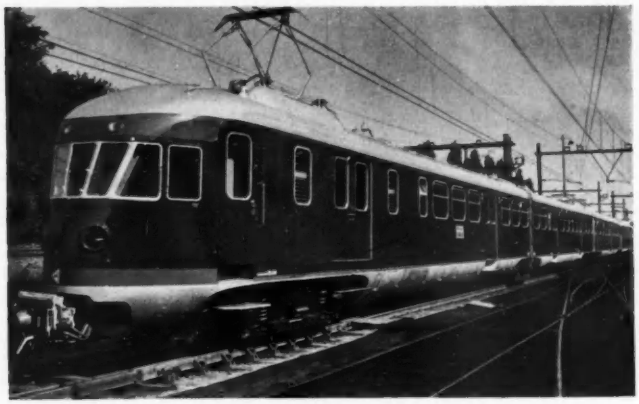


8 *Italian State Railways special electric express.*

the U S A. A feature of 'Train X' is the pendulum suspension, which causes the body to swing to the inside of a curve at speed. On a normal vehicle, with a high centre of gravity, though the outside rail of a curve be correctly superelevated, the body tends to counter-bank as much as two degrees from the perpendicular at 75 mph. Experiment with pendulum suspension began in the nineteen-thirties. Weak points of the 'Talgo' are the necessity for turning it, and difficulties in varying its length according to demand. British trains are particularly variable. 'Talgo' is a mechanical caterpillar with a head and a tail.

One new American project of this type for the Chesapeake and Ohio has a motor unit at each end, and this is a *sine qua non* in inter-city services of the sort that British Railways must provide if passenger traffic is to retain its importance on the rail. In passenger service, the train has grown into a 'train simple' rather than a conjunction of locomotive and coaches. This has, of course, long been the case with multiple-unit electric trains, such as those working between London and the South Coast. These are over 20 years old, and a 52 mph average rather dates them, yet the service remains the best in the world round the clock in the 50–60 miles range. British Railways have already spoken of halving that schedule, so clearly something unusual is contemplated. One need not be too sanguine however in believing that American – and Continental – lessons will be heeded, for all our pride in century-old pioneership.

But the tubular body, which the writer believes to be the form of the future, is as yet unrepresented in Great Britain. So is the high-capacity sleeping-car with single cabins staggered on two half-decks. The low-slung train is not necessarily ideal in all respects. It is noisier, and its outlook is not so good. The thesis that the higher you go the better has inspired the vista-dome in America. But we must continue and increase our study of the new form in the railway train. Our old trains were most beautiful in their prime. But the style of the electric locomotives on the Manchester–Sheffield line cannot be criticised for the deplorable reason that there is none.

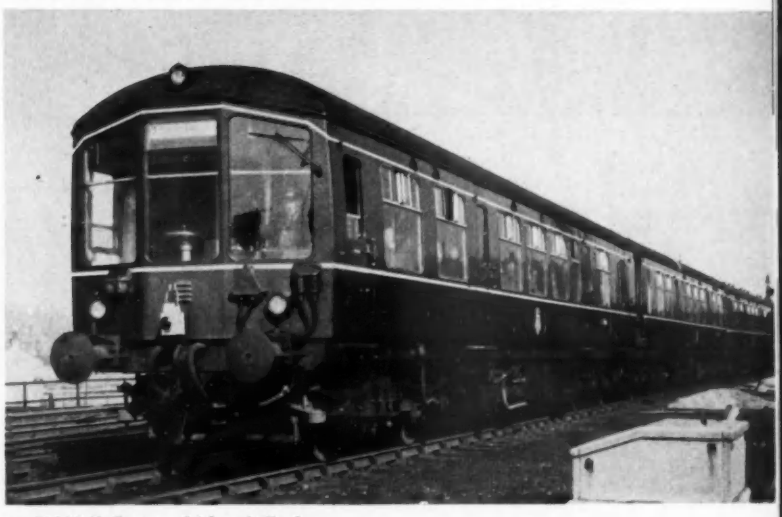


10 *Netherlands Railways multiple-unit electric.*

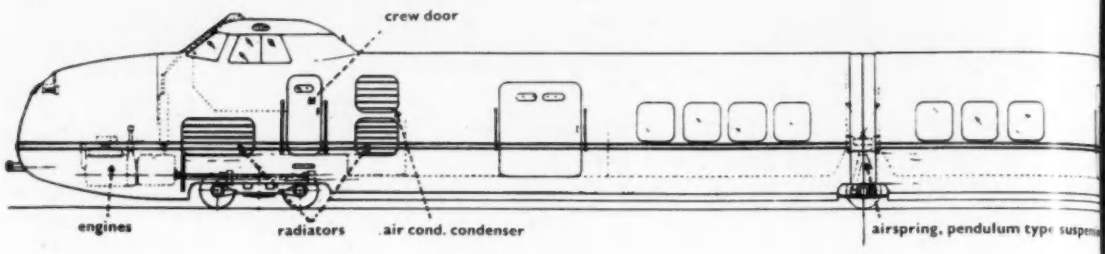
## complete trains

Squat, functional but with pleasing lines is the typical French *autorail*, **7**, in a dull red with cream upper quarters, and shown here with the control-trailer leading. Much more imposing is the Italian multiple-unit electric express, **8**, marred, however, by the bulbous cowling about the buffing gear. The driver sits in the cupola, with a passengers' observation compartment below him. The 'Talgo' is a radical departure from accepted principles in rolling-stock design. It is still in the larval form, and looks so, but this modified German example, **9**, has a better appearance than the original 'Talgos' in Spain, which had the locomotives much higher than the cars. The Dutch multiple-unit electric train, **10**, based on a pre-war design, is practical and workmanlike, but rather reptilian. It is dark green and aluminium, with broad vermilion bands in front. The cars are internally clerestoried. Altogether more imposing in royal red is the German diesel-hydraulic train for fast inter-city services, **11**. The winged decoration on the front has the virtue of being the Bundesbahn's symbol. Almost desperately traditional is British Railways' new multiple-unit diesel train, **12**. Still we cling to the axiom that a railway carriage must comprise a body mounted on top of a separate frame. The front outlook can be enjoyed by passengers looking over the driver's shoulder.

11 *German Federal Railway multiple-unit diesel.*



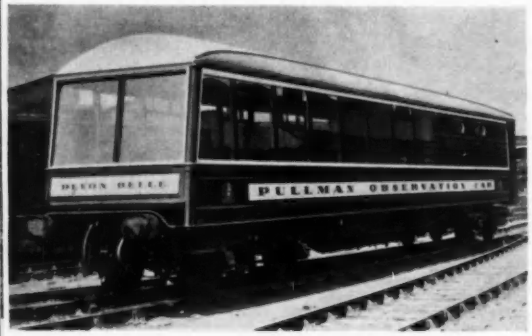
12 *British Railways multiple-unit diesel.*



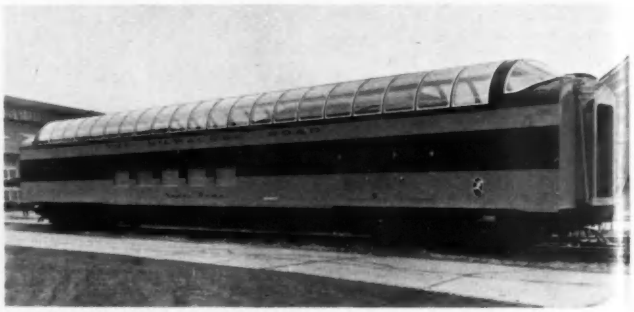

## observation cars

The British example, **13**, for the 'Devon Belle', it must be supposed, was improvised in a hurry. It was at least effective however as a rear observation car, which cannot be said for the rear of the Milwaukee 'Hiawatha', **14**. Its architectural massiveness is as preposterous, in its way, as the small girl's topless straw hat. Most admirable for the purpose of enjoying scenery is the two-deck car of the same railway, **15**. The shape is elegant and simple and is conceived in terms of a moving vehicle. Its height would preclude similar arrangements in this country.

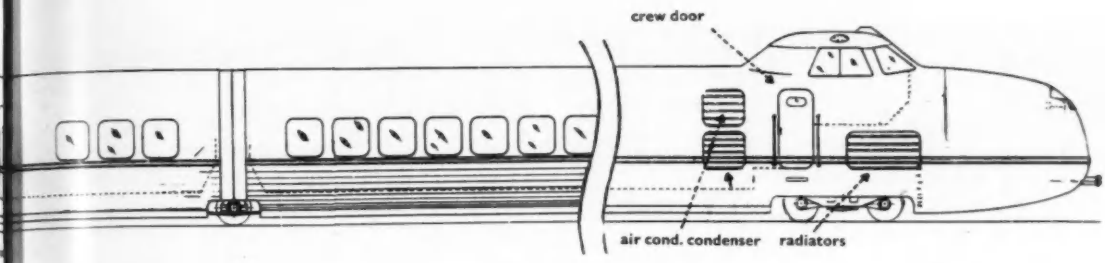
**14** *Milwaukee Railroad, USA, observation car.*




**13** *British Railways observation car.*



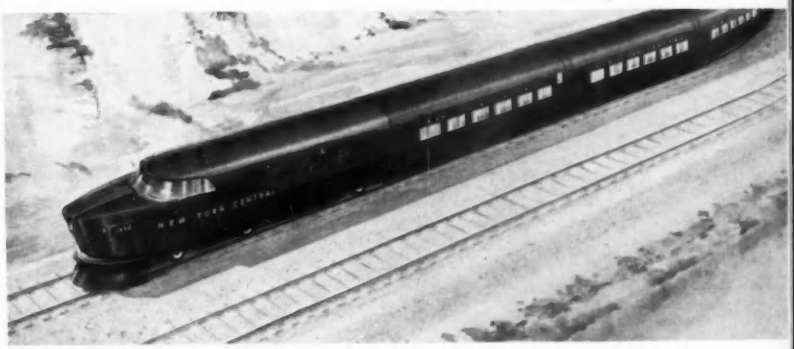
**15** *Milwaukee 'all dome' observation car.*



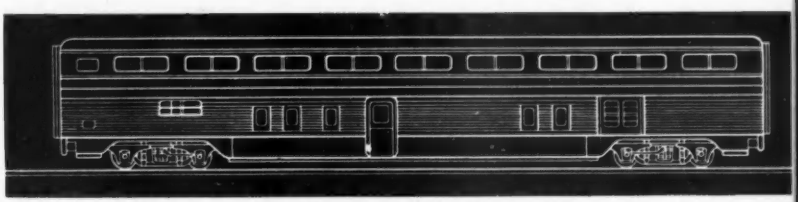

16 *Chesapeake and Ohio, U S A, light-weight diesel.*

## American projects

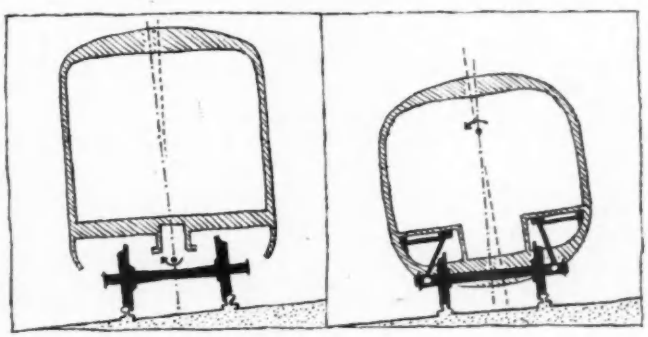
All these examples show clearly how American designers are developing modern forms to convey a sense of speed and efficiency as a means of selling rail travel to the public. Present tendencies are to make the train a single unit, rather than a combination of locomotive and cars. These have their limits in practice, but where they are employed it is essential that the train should be double-ended, as in the Chesapeake and Ohio variation on the 'Talgo', **16**. One-headedness, which necessitates turning on a triangle, is the weakness of the prototype 'Talgo' and of the New York Central project, **17**. Most gratifying is the reaction against the old American ideal of making the cars as heavy and gigantic as possible on the premise that this made railway travel safer. At the same time reaction must be watched. The large car with high centre of gravity still has its virtues, exemplified in the Santa Fe vehicle, **18**. There is much to be done in the improvement of suspension, as shown in the diagrams, **19**, of a conventional American coach and the low-slung 'Train X' by Pullman Standard, designed to counteract the normal swing outward on a curve – one of the causes of travel sickness.



17 *New York Central 'Train X'.*



18 *Atchison, Topeka and Santa Fe Railway System, USA, 'Hi-level' coach.*



19 *Conventional and pendulum suspension.*

18 and 19 *Courtesy Max Gschwind and 'Fortune'*

Drawing by Philip Thompso

*If intentions are realised, the nature of British Railways' passenger trains will change much in the next 15 years. We know that the side-door compartment coach is to go, except from suburban trains where its high seating capacity and quick loading and unloading are important advantages. By 1970, apart from suburban stock, carriages will be invariably of the corridor type, in one form or another. Pointers suggest that adjustable reclining seats are on their way here after many years of successful use in North America. The change-over to cleaner motive power also offers new opportunities for brighter interior schemes; no longer will the all-pervading grime of the steam train be an excuse for the depressing drabness which is so often the cause of bitter complaint today.*

# Inside the train

HAMILTON ELLIS

THE TRADITIONAL BRITISH RAILWAY CARRIAGE stemmed from the road coach. It was produced simply by a multiplication of stage-coach 'insides' mounted together on one frame, forming what we still know as the 'compartment' coach. The Great Northern added a side corridor for lavatory access in 1881; the Great Western produced a complete corridor train ten years later. The centre-corridor American car was the joint offspring of the canal packet and the omnibus, and achieved its highest form in the Pullman car from 1865 onwards.

There was little conscious attempt, in Victorian England, to design train interiors; although the best examples – carriages of the Midland and of the London and North Western railways about 1900 – were handsome and 'belonged'. The style was traditional, Georgian rather than Victorian. Less successful were the exaggerated plush and glitter from across the Atlantic, which endeavoured to make the interior of a train as gorgeous as possible. Then there was reaction, exemplified in the 'Flying Scotsman' of 1914, towards what was proudly called 'tasteful simplicity', which was merely stodgy. The 'jazz' phase of the nineteen-thirties followed and produced, among other things, moquettes with garish, jagged patterns, some of which are still in use today. After the war, British Railways began to introduce a new range of moquette patterns. These moquettes, designed by Ian Colquhoun working with the Architect's Department, showed a welcome break from previous practice and resulted in some

*A typical American 'vista-dome' by the Budd Manufacturing Co.*

1 *British adjustable reclining chair (Pel Ltd).*

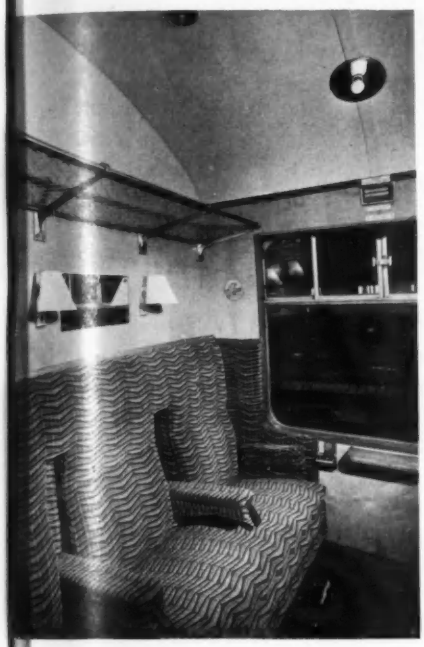
2 *Italian State Railways special first class compartment.*

designs of the highest standard (DESIGN February 1953 pages 22–28). It is interesting, however, to compare these with the brilliantly coloured examples produced in this country for the Canadian National Railways (DESIGN January pages 20 and 21) whose enlightened attitude to the problem of cleaning and maintenance is well worth study.

The latest examples of British Railways' approach to carriage interior design can be seen in the multiple-unit diesel trains which are now coming into service. Altogether 4,600 of these trains are required. Their coaches are straightforward, simple and seem well suited to their purpose. Though one may deplore the reversion to conventional moquette patterns, the use of plastic sheeting for wall coverings shows an encouraging willingness to experiment with new materials.

It is in the standard corridor coach for main-line services that a new conception of carriage design is most urgently required. The open type of carriage with adjustable reclining seats offers standards of comfort over long journeys far in advance of anything at present in this country. We have clung to the closed compartment in day coaches for so long that there is a feeling that British passengers themselves insist on it. But the reclining seat coach is not only comfortable by day, it is for most people quite tolerable at night, at least for a single over-night journey. Sleeping cars, though essential,

3 *German Federal Railway 'Senator' coach.*



4 *British Railways standard third class compartment.*

## sitting

Easily the best interior is that of the German 'Talgo' type 'Senator', **3**, with adjustable seats and built-in lamps derived from aircraft practice. Adjustable seats are made in Britain for export, **1**, but are not yet installed in our trains. Long established in North America, these seats are often ponderously modern in appearance, **6**. The Italian electric express interior, **2**, has refreshing murals, but its false flat roof is oppressive and unnecessary. Of their type British standard compartments provide excellent third class comfort, **4**, and the illustration shows one of the moquettes designed by Ian Colquhoun. The British multiple-unit diesel interiors are basically good but this example, **5**, shows a deplorable return to a conventional moquette pattern.

are wasteful of space and weight and a reduction of their numbers through the use of reclining seats would seem to have many advantages. There has been little indication of what changes we may expect in the sleeping car itself, where colour, detail and finish and the design of fittings could be much improved. Considerable experiment has been carried out with various methods of providing refreshment facilities on trains and here again the design of the standard dining car which has resulted, though basically simple and restrained, leaves much to be desired.

In all this there is a great deal to be learned from abroad. In the U S A and Canada, the reclining chair has long been established, and the consideration of passenger requirements has been carried further than anywhere. The distances involved and the competition from the air have provided powerful stimuli for improvements in design. But lest it should be thought that these countries deserve unqualified praise for design, it must be said at once that the very bad has been apparent as well as the good. If our Southern lines produced the 'tavern car', American companies have built 'log cabins' and suchlike, and there the traveller usually has to spend much longer in the train than here. They have also carried the hotel conception of train interiors to an extreme which seems unnecessary and undesirable – a tendency which is sharply reversed by the

5 *British Railways multiple-unit diesel interior.*

6 *Budd Manufacturing Co, USA, reclining seat coach.*

7 *Pennsylvania Railroad, USA, club car.*

## eating & drinking

The Pennsylvania club car, **7**, is an example of the high standard of design and careful attention to detail in many American railway coaches though the limited window space is a common fault. The Santa Fe diner of 1951, **8**, shows a new treatment of a conventional type of car, with an insistent but cheerful use of bright print curtains. The reflected lighting is good. The British Railways standard diner, **11**, is spoilt by a certain Nissen-hut effect although the all-over patterned carpet is refreshing. The treatment of the bar in the German 'Komet', **12**, shows that elegance and comfort can be achieved without recourse to heavy architectural styles as in the American bar coach, **9**, which nevertheless illustrates the attention given to passenger amenities. Much of the success or failure of these contemporary treatments depends on colour of upholstery, carpets and panels.

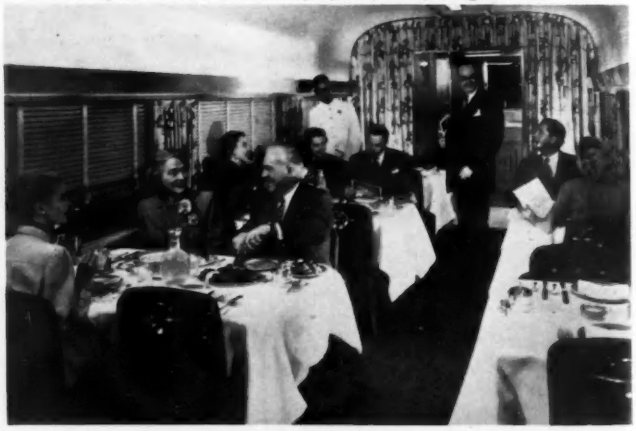
**9** *Chicago, Burlington and Quincy Railroad, USA, bar coach.*

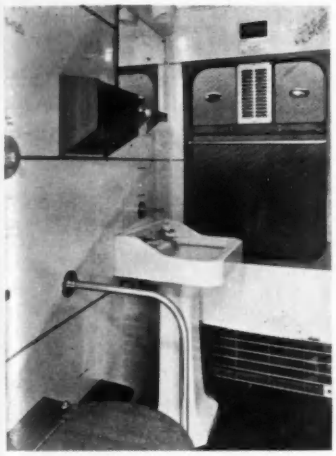
new low-slung 'Talgo' type trains which will soon be operating. Many elements in American railways could, however, be adapted to the British system without direct imitation. The 'vista-dome', for example, has proved to be enormously popular and is now taken for granted in the States. Normally, it consists of a partial upper deck covered by a raised transparent cupola. Underneath is a lower deck in a well between the bogies containing a bar or some other amenity. Although it had its origin in a type of carriage built in Russia as long ago as the sixties of the last century, the 'vista-dome' could be successful only when smokeless traction prevailed, not before, as the carriage roof is one of the dirtiest parts of a steam train.

The idea is a good one, and the change-over to electric and diesel traction should likewise open the way for observation cars in this country. But if the raised dome is impossible in England, because of a height restriction to under 13 ft, there are surely other types of observation car, which would be successful. The Germans introduced before the war special railcars in which the entire body was domed. There is no reason why coaches built on this principle should not be used on main lines through many parts of this country, while sightseeing motor railcars would be particularly welcome on such lines as the Callander and Oban, the Cockermouth, Keswick and Penrith and some of those in Wales.

In all cases a modern vehicular approach, so well illustrated by the

**8** *Atchison, Topeka and Santa Fe Railway System, USA, dining car.*





10 *Adequacy without art in a British train toilet. The pedestal basin is inappropriate and reflects suburban snobbery in such things; either a built-in form or a corbel would have been more hygienic and more agreeable.*

best American examples, is essential if the observation car is to serve its purpose properly. It is significant that the only recent British examples, briefly used on the 'Devon Belle', are of extraordinary construction totally lacking character (see page 22).

The American 'club car', in its various forms, would have a less widespread appeal to the British traveller. Designed essentially as an informal lounge with detached and therefore movable chairs, and facilities for writing, drinking, or general relaxation, it allows a certain freedom of movement and a relief from the boredom of a long journey. Its very name, however, implies a sociability which is hardly conceivable among travellers so reserved as the British.

The comfort of these 'extras' does not, of course, in itself constitute good design. It is also quite clear that the £230 million which is available under the modernisation plan for the replacement of passenger carriages would not allow for the introduction of these special purpose coaches on all express main line services. There is, however, a great need for a few trains with exceptionally high standards of comfort and design. Such trains would act as an enormous spur to the prestige of the railways as a whole, and would be particularly valuable on routes from the major ports where foreign travellers would gain their first impressions of the amenities which this country has to offer. Of the named trains in service today the most individual is the 'Brighton Belle' which is a post-Victorian

11 *British Railways first class dining car.*

12 *German Federal Railway bar in 'Komet' train.*

13 *British Railways third class sleeper.*

14 *Pullman Standard sleeper, USA.*

## sleeping

While we still have some of the most comfortable third class carriages in the world, one could wish that this British sleeper, **13**, had less of the ship's carpenter about it. Better in this respect are both the American 'bedroom', **14**, with its excellent berths, and the German second class 'roomette' on the 'Komet', **15**. The 'roomette' is a longitudinal berth compartment in a car with a closed central corridor; a form difficult to adopt in Great Britain, where lateral width is irremediably restricted – the price paid by pioneers. The German wash basin is neat and compact in design.

pastiche – hardly the right approach, one would have thought, to the special train though it was built in 1932.

In general, views on the most agreeable surroundings for railway travel have changed considerably in half a century. The old aim was to disguise the vehicle as a room; the superior train was a sort of hotel on wheels. Private motoring has caused people to esteem the vehicle *as* a vehicle, and not as an imitation of something else. Among its several undoubted virtues the 'Talgo' provides the reply to that change in outlook.

Clearly an opportunity now exists to develop further this conception of the railway coach. The slow 'cleaning up' process which is the only discernible sign of progress in carriage design over the years has reached a point where little further development can be made without a drastic review of basic problems involved. The challenge of the new American and German trains of the 'Talgo' type must be met if the public is not to feel that somewhere the modernisation plan has misfired. The challenge must be met at the design level and the problems tackled by designers who are not hampered by traditions and customs which are no longer relevant.

15 *German Federal Railway second class 'roomette' on 'Komet'.*

16 *Italian State Railways lounge.*

## viewing

With the disappearance from trains of smoke emission, the observation car comes its into own. One of the earlier examples of an American 'vista-dome' observation room in a two-deck car, **17**, exemplifies this, as does the forward observation lounge in the Italian electric express, **16**, and the half-deck Italian car, **18**. Certainly, only Latin exuberance could have produced the furniture on the lower deck of this latter example, which at once captivates and repels. It is as precious as anything Italian can be, with holes in the chairbacks, for the accommodation of bony people's vertebrae, and the vulture-spread of the headrests which is strangely menacing and inconvenient for viewing. But it shows an inventiveness and vitality often sadly lacking in railway design. The rear car of the 'Hiawatha', **19** (also page 22), illustrates a peculiarity of so many American observation cars; the place is a sort of sun parlour with both chairs and fixed seats turned inwards, so that such scenery as the 'Hiawatha' traverses will not distract the passengers as they chatter their way from city to city.



17 *Missouri Pacific Railroad, USA, dome car.*

18 *Italian State Railways dome railcar.*

19 *Milwaukee Railroad, USA, 'Skytop' lounge car.*

TOBACCOS
CONFECTIONERY

# Station architecture

A FOREWORD BY J. M. RICHARDS

IN SPITE OF ITS OBSOLESCENCE and grubbiness, the architecture of Britain's railway system has many fine qualities which the designers of new railway buildings would do well to emulate; not in any spirit of sentimental attachment to the past, but because the best railway architecture is an object-lesson in the forthright application of means to ends. It was created at a time when new materials and techniques – especially the use of iron and steel – were revolutionising building, and it reflects a strong, positive belief in the employment of these techniques to their maximum capacity.

Whether we look at the great double arch of King's Cross station, at the vaulted iron roofs of covered stations like York, at the graceful iron and timber roof-construction of innumerable smaller stations or at the boldly functional design – at the same time full of character – of innumerable details like railings and lamps and lettering, we see a robust tradition that can be described as functional in the best and fullest sense. Rigorous engineering standards are allied to a sense of human purpose. Now functionalism is one of our own watchwords, and it would be in tune with the spirit of our own times if we were to make it our task to carry this railway tradition forward: without copying what was done before – or even trying to remain 'in keeping' with it – to apply the same functional principles to the new problems that are posed today, and exploit in their turn, to their maximum capacity, the new technical resources that we now possess. In this way we can preserve what is still valid in the railway tradition and at the same time revitalise it.

Which of our many new technical resources can be regarded as the equivalent of the iron and steel construction and the other developments that gave the building of the railways its creative impulse a hundred years ago, and will therefore repay us in the same coin if we allow ourselves to be inspired by them now? The most obvious answer is, I suppose, all that is implied by the term *prefabrication*: the factory-production of building-components, the organisation of a building programme so as to make the most of the economic advantages of this method and the scientific analysis of building needs so that in the components themselves form and function shall be logically united. This is the direction in which architecture has been moving for a long time, but its implications – not only technical and economic but from the point of view of all-round architectural quality – have been but tentatively realised. Since the railways have in the past been the testing-ground on which technological experiment has been translated into architectural achievement, it is apt that they should become so again, and demonstrate for the first time that prefabricated building systems can produce an architectural idiom of real character and solidity.

Railways, moreover, are peculiarly suited to a style of architecture founded on the serial production of factory-made components. The structures they need: signal-boxes, platform-shelters and verandahs, refreshment-kiosks and waiting rooms, serve identical purposes wherever they are sited, and the different requirements of each site can be met by different arrangements of standard components. Various studies of the application of prefabricated systems of construction were indeed begun during the war by the staff architects of the old L M S Railway. The buildings produced were, of necessity, on a small scale and the architectural forms evolved of a somewhat tentative kind. But they were clearly on the right lines, and now that ambitious modernisation plans for the railways have been announced by the Government, there is the chance to experiment with prefabrication on the large scale needed to make the most of its advantages. The attributes of character and solidity, to which I have already referred, and which till now have been noticeably lacking in buildings based on prefabricated construction, will be achieved not only by a whole-hearted acceptance of the idea of prefabrication but by a fresh study of every type of railway building.

Many new factors besides the potentialities of prefabricated construction must be taken note of, for modernisation will be a failure if it is allowed simply to mean replacement and renovation. On the planning side, for example, fresh thought will be needed to integrate the railway services with other forms of transport (when the railways pioneered the first mechanised transport system, they had the field to themselves; now they must share it with road and air transport); and at every stage – whether that of the planner, the architect, the structural engineer or the industrial designer – the task is essentially a team one. The construction of Britain's railway system was the last great effort before the divorce between engineering and architecture disorientated the whole future of both these arts. This new enterprise could be made the first step towards reuniting them.

◀ *Cross vaulting at Paddington Station.*

*Victoria*

*Victoria: a depressing invitation to Europe*

*Paddington*

ABOVE *and* BELOW: *Liverpool Street*

## DISORDER

*Charing Cross*

RAILWAYS

# Survey of stations

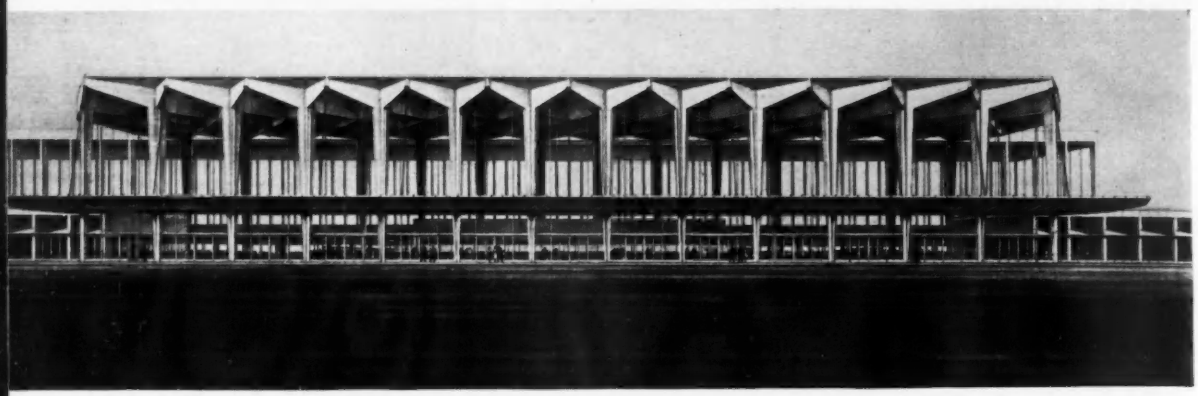
UNDER THE MODERNISATION PLAN, £55 million are to be spent on building new stations and improving old ones. Schemes that are already in hand, or will be started within the next two years, have been announced for 15 stations and, from details that are available, that at Banbury promises to be the most exciting project by British Railways for many years.

Though Cannon Street is to have a new roof, and Euston a new departure concourse, there is little indication that any of the big London termini is to be rebuilt. The most modern example of a transport terminus in this country is the new passenger building at London Airport and this will remain a yardstick against which the design of new stations will be measured (DESIGN July pages 10–16). Its approximate cost of £2 million would seem to indicate that the complete rebuilding of at least one of the London termini would not be out of the question, though the necessity of maintaining rail services during reconstruction would add enormous complications. The illustrations on pages 36 and 37 show, however, that the problems have been overcome, and high standards achieved, abroad. If we cannot hope to rival these at once, we can at least set about the task of eliminating such obvious black spots as are shown on the opposite page, chosen at random from four main line London stations.

The smaller stations present less difficulty, for there are greater prospects of achieving an integrated solution to each project. Only a handful of new stations of this type have been built since the war and the standards of design vary considerably. That at Grays in Essex is by far the most interesting and should serve as an example to be maintained elsewhere. There is still a long way to go, however, to rival the achievements of London Transport Executive, whose enlightened policy in this respect has well established roots.

The chance of creating a consistent standard for British Railways is made more difficult by the regional system on which it is organised. Thus different standards may operate in different regions, examples of which can be seen in the new booking halls at Victoria and Paddington; the former heavy, ponderous, with a hint of the spurious grandeur of totalitarian architecture, the latter light, cheerful, elegant – qualities repeated in the new ticket office at Norwich Thorpe. The need for consistency should not, of course, preclude individual expressions. At Portishead in Somerset and Woodford in Yorkshire, admirable attempts have been made to express local characteristics, though the results suggest the handicap of severely restricted budgets. Where refreshment rooms are concerned a new complication arises, for the decorative schemes and the choice of furniture and fittings are the responsibility of the Hotels and Catering Services, whose record in these matters has often been far from satisfactory. Many of the old refreshment rooms will be redesigned under the plan and it is to be hoped that the tawdry modernism of the Golden Arrow Bar or the weak gentility of the new lounge bar at Brighton will be avoided.

◀ Dirt and grime have perhaps been inevitable in our stations, but the piecemeal additions over the years have produced a chaotic appearance which is even more evil because it could have been avoided. Conflicting notices, dank corners, neglected piles of rubbish, dark depressing waiting rooms – these are the results of a *laissez faire* approach to design, a lack of the type of policy which we are advocating in this issue. These pictures are from four London stations, but they could be repeated endlessly up and down the country.



1 *Naples*

2 *Rome*

3 *Toledo*

4 *Oslo*

## stations abroad

These illustrations of developments in station design in many countries abroad make a telling comparison with the handful of small stations built in this country since the war. The vast destruction of the railway systems on the Continent provided a stimulus for rebuilding which we are now beginning to realise has left us far behind. In the U S A and Canada, the stimulus has come from intense competition from road and air transport and has resulted in careful consideration of passenger amenities.

1 *Project for a new station at Naples – a revolutionary design indicating the advanced thought of Italian architects in this sphere.*

2 *Rome, perhaps the most impressive architecturally of all.*

3 *Central Union Terminal, Toledo, an example of passenger amenities provided by New York Central System.*

4 *Model of Central Station, Oslo, for Norwegian State Railways for which preliminary demolition work is already in progress.*

5 *A modern German station at Heidelberg.*

6 *Amstel Amsterdam, showing the opportunities for mural decoration in new station architecture.*

7 *Canadian National Railways Central Station, Montreal, showing the closed concourse with stairways and escalators to street and platforms.*

*Design: Number 81*

5 *Heidelberg*

6 *Amstel Amsterdam*

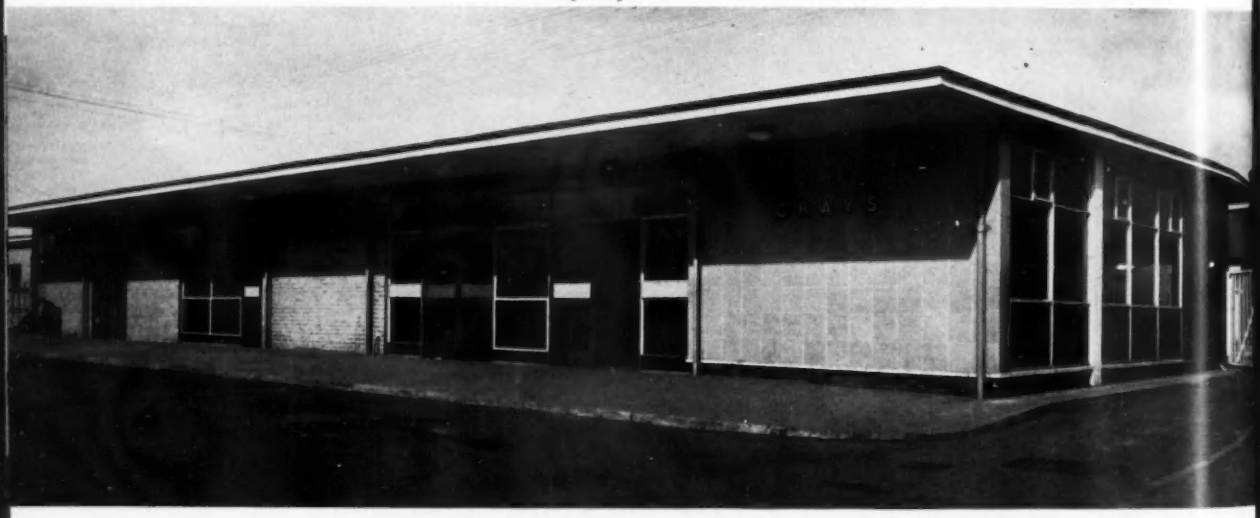
7 *Montreal*

## stations at home

The modernisation plan offers a big opportunity to end the paucity of good modern station design in this country. But as many of these illustrations show (and they include British Railways' most advanced work in recent years) a much more bold, consistent and co-ordinated approach is sorely needed if we are to avoid having £55 million worth of 'make do and mend' spread evenly up and down the country.

8 *Twickenham*

9 *Grays*



10 *Banbury*

11 *Twickenham*

12 *Grays*

8 *Twickenham, the only new station by the Southern Region, is chiefly notable for the sensible name signs which are clear, closely spaced, illuminated at night and set at right angles to the track so that passengers in approaching trains can see where they are before the train stops.*

9 *Grays, Eastern Region, the most modern and elegant of new British stations, is the only one to rival standards set by London Transport Executive.*

10 *Project for Banbury, Western Region, on which preparatory work has already started. The sketch suggests that this will be considerably more advanced than existing stations in this country. Details of other new projects are not yet available.*

11 *The waiting room at Twickenham is basically pleasant but no thought has been given to the choice of furniture which could hardly be more crude.*

12 *Booking hall at Grays is clean and orderly and gives point to the remarks of Sir Reginald Wilson, Chairman of the Eastern Regional Board* (see page 44).

13 *Portishead, the most interesting station by the Western Region, shows a welcome attempt to express local characteristics, though the result is a trifle austere.*

14 *This station, designed for London Transport Executive by British Railways' Western Region clearly shows that, given the opportunity, railway architects are capable of an experimental approach which, it is to be hoped, the modernisation plan will foster.*

13 *Portishead*

14 *Ruislip*

15 *Norwich Thorpe*

## stations at home

**15** *New ticket office at Norwich Thorpe is in complete contrast yet harmonises with its Victorian background. Red and grey plastic panels are contained by the dark timber frame.*

**16** and **17** *Contrasts in station refreshment interiors.* **16** *Dining room at Leicester (London Road), London Midland Region. Designed in 1947 it still looks modern and unpretentious.* **17** *Lounge bar at Brighton, Southern Region, redesigned last year, with crude furniture and conventional carpet – 'make do and mend' at its worst.*

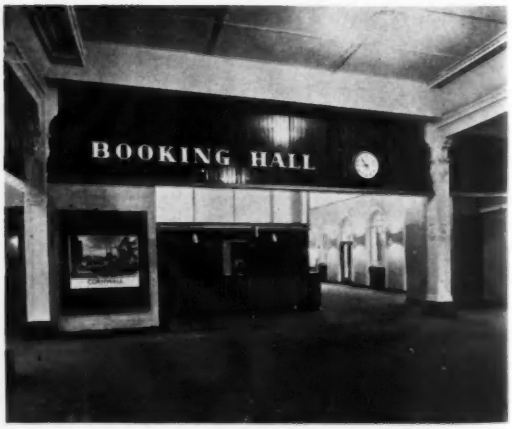
**18** and **19** *Contrasts in redesigned booking halls.* **18** *Victoria, Southern Region, is cold, ponderous, falsely grand.* **19** *Paddington, Western Region, is warm, colourful, elegant – note the careful placing of the clock.*

16 *Leicester*

17 *Brighton*

18 *Victoria*

19 *Paddington*



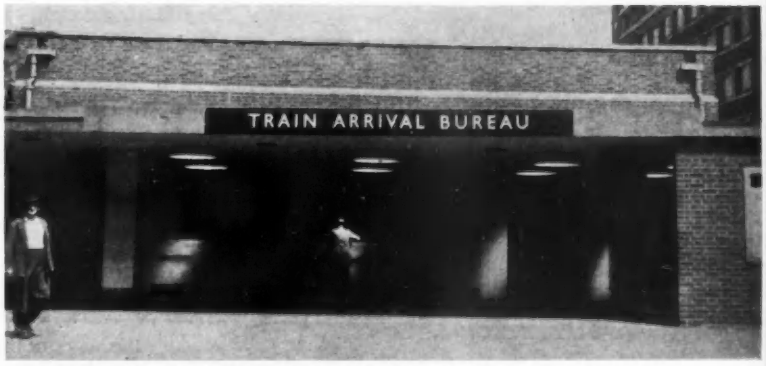
20 *British Railways, St Pancras.*

## indicators

With indicators clear lettering, neatness and careful siting are first requirements. Illuminated signs have begun to make an appearance, the most elaborate in this country being at Euston, **23**, arranged like a cinema, while some Continental pictorial signs, **24**, suggest further developments. The condensed lettering of the Swiss example, **25**, is particularly clear while the Canadian, **22**, is too tightly packed for easy reading. The light framework of the U S A indicator, **21**, does not distract the attention as it could at St Pancras, **20**, where the information panel also seems too high.

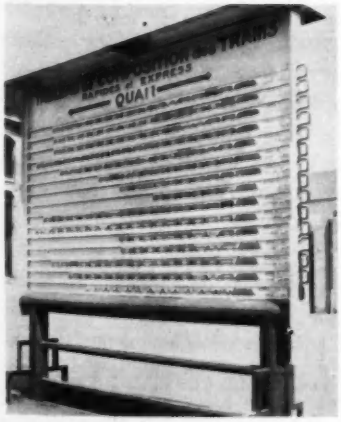
21 *New York Central System, Central Union Terminal, Toledo.*

22 *Canadian National Railways, Central Station, Montreal.*




23 *British Railways, exterior of train arrival bureau, Euston.*

24 *French National Railways, Dijon.*




25 *Swiss Federal Railways, Zürich.*

RAILWAYS

# Publicity

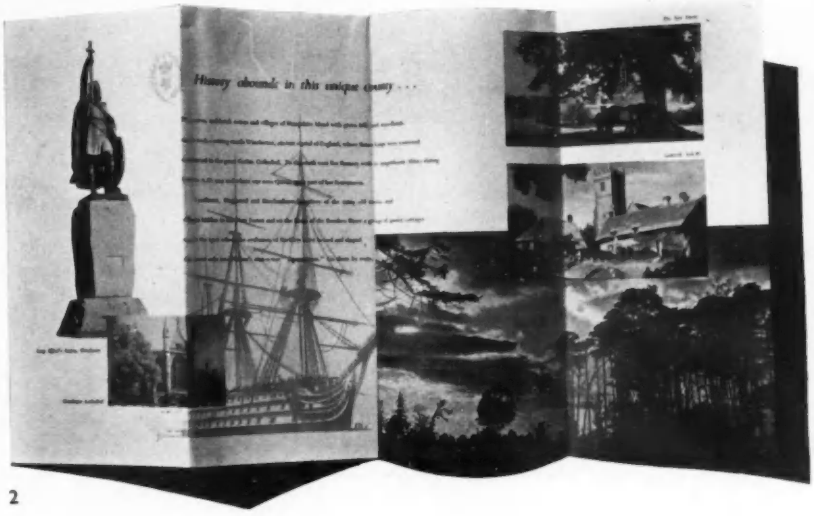
ANTHONY ADAMS

*Poster display column at Victoria is gay and decorative.*

IT HAS BEEN SAID often before that nationalised industries and public corporations are – in the realms of art and design – the patrons of our generation. One has only to think of the underground and bus posters of London Transport Executive, the stimulus given to architecture and interior design by the Festival of Britain or, in the field of engineering design, the role played by British airways, to see how true this can be. Unfortunately the railways of Britain, as at present constituted, cannot be said to fulfil a similar function; for 'British Railways' is an idea only – it does not exist as a single entity and consequently no overall design policy governs railway publicity in this country.

The co-ordinating body for the railways is the British Transport Commission whose publicity department – concerned not only with railways – issues a great deal of material including brochures, leaflets, posters and booklets, some of which are for sale to the public. There is also, of course, a considerable amount of press advertising which is outside the scope of the present article. But the bulk of the publicity originates in the Regions, each of which has its own autonomous and independent publicity officer. In this situation one would expect to find – and, indeed, does find – a wide variation in the approach to design, and a great disparity in its quality. Much of the material issued throughout the country is – as this survey will show – of a very high standard; nevertheless, it sinks extraordinarily low at times and it is clear that the left hand does not know, in a great many cases, what the right hand is doing in this respect. A telling example is the comparison of the leaflets, 4, issued in connection with particular trains. That by the Southern Region for the 'Bournemouth Belle' is neat and tasteful: Western Region's leaflet for the 'Cornish Riviera', on the other hand, is inept in the extreme – a

1




2

## brochures

In this field the contrast between good and bad is marked. A few of the travel brochures are extremely good – making use of imaginative layout and typography in the best modern idiom – but much of the print is untidy and clearly lacking the hand of a designer in its conception. Here, particularly, a centralised policy and house style could effect great improvement.

3

4

**1** and **2** *French travel brochures are invariably good, but the piece issued by the Southern Region, designed by R. Lander, is superior to the French example in both layout and typography, and colour is skilfully used.*

**3** *A good deal of British railway material is published for sale to the public. Compare the excellent exhibition catalogue, left, designed by Charles Hasler and published by British Transport Commission with the tasteless holiday guide, right.*

**4** *Two leaflets advertising special trains nicely illustrate just how good and how bad printed matter can be.*

*Design: Number 81*

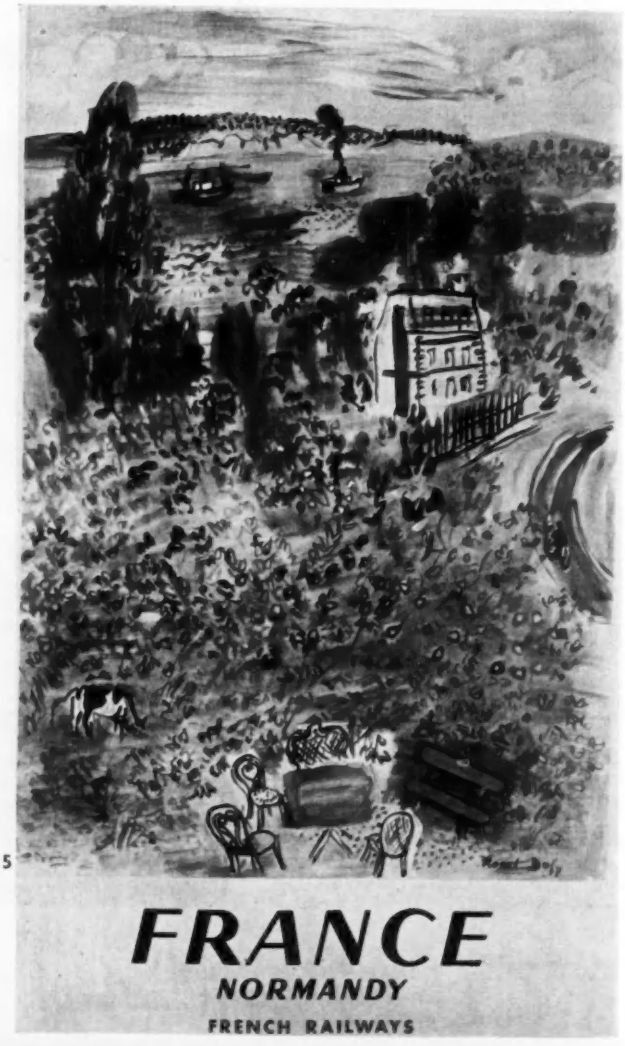
combination of crude artwork formless typography and poor colours.

Design is not a fad, it is a way of thinking. It can make the dreary gay, the confused orderly; it can infuse vitality into places where the spirits might flag (station waiting-rooms, for example) or compose warring elements into tranquillity: thus it may contribute to a healthier society. That influential people within the industry are concerned with the problem is clear from the speech of Sir Reginald Wilson, Chairman of the Eastern Area Board, and member of the British Transport Commission, at the 'Railway Poster Art' exhibition at Lincoln, in May. Commenting on the effects of economy regulations on the appearance of our railways, he said that their founders well knew the important role played by "the intangible and imponderable values" such as well-kept stations and polished brass and copper engines. This attitude had not been maintained and for many years we had become used to dirt and dilapidation. But Sir Reginald went on to add: "I am exceedingly glad to think that this unhappy phase in the history of British Railways is coming to an end, and that our old appreciation of the intangibles will re-assert itself, not merely because it is right and proper, but because it happens to be sound business also, in the long run." The railway poster, he said, "can be both a civilised piece of art and a sound piece of business".

Perhaps it is not unreasonable, then, to ask that such an important and pervading structure as our railway system should strive to attain the highest possible standard in the design of its publicity matter as it does in the safety and efficiency of its service. But to do that, an overall design policy is called for – a policy that could be formulated and applied only by a central authority. This is not to say that regional freedom to deal with local requirements should be denied, but certain basic considerations – the standard of creative work commissioned, use of typefaces, *the approach to design* – need co-ordinating. A house style in fact.

## posters

Quality varies considerably, but the general standard is below that of normal commercial poster design.
This is partly due to the prevalence of naturalistic posters of scenery or buildings for which (with exceptions, of course) the paintings commissioned are generally academic and unimaginative.
They lack the grace or verve of some French posters, for which paintings of a very high standard are often used.
It is only fair to add here that the North-Eastern Region has taken the welcome step of commissioning at least one poster by Edward Bawden.
In spite of these criticisms, many of the posters are first-rate, and one can detect a tendency to treat historical and architectural subjects in an impressionistic and witty manner that is very successful.
The standard of lettering is generally high, and most of the posters are well printed.




5 *Naturalistic topography is possibly the largest single category of travel posters. Unlike London Transport Executive, British Railways often commission landscape paintings of conventional character which are in marked contrast to Raoul Dufy's charming evocation of Normandy for the French National Railways.*

How wonderful to get away...
Only a few days—
longer if you can.
Early in the Spring
or late in the year
just when you need a change.
Let yourself be spoilt for once—
the friendly hotels
will see to that.
You can rest and relax
and you'll be surprised
what a holiday in Jersey
will do for you.
JERSEY
Enquiries from A. Ingoldby, Box 58, Tourism Official Information Centre, Jersey, C.I.

6

7

8

**6** *Co-operation between British Railways and local authorities sometimes results in the commissioning of top ranking commercial artists. This example for Jersey designed by Alastair Mechie is unusual in its use of a fashion genre – a clever exploitation of snob-appeal.*

**7** and **8** *The fine quality of the drawing and subtle use of colour make the Belgian poster effective, while the photographic treatment of the example from Sweden is reminiscent of the Swedish cinema.*

**9** and **10** *The historical approach, particularly favoured by the Eastern and North-Eastern Regions. At its best (in the whimsical and gaily coloured map of Nottingham by Kenny Lee), this type is very attractive; but too often historical subjects are an excuse for sentimentality and undisciplined design, as in the Western Region's poster for Bath, by Gordon Nicoli.*

*Design: Number* **81**

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10

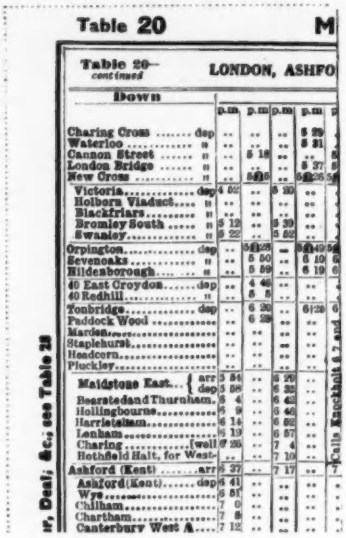
Table 20 M

Table 20— continued LONDON, ASHFO

Down

| | p.m. | p.m. | p.m. | p.m. |
|---|---|---|---|---|
| Charing Cross ..... dep | .. | .. | .. | 5 29 |
| Waterloo ..... ,, | .. | .. | .. | 5 31 |
| Cannon Street ..... ,, | .. | 5 18 | .. | .. |
| London Bridge ..... ,, | .. | .. | .. | 5 37 |
| New Cross ..... ,, | .. | 5 25 | .. | 5 26 |
| Victoria ..... dep | 4 52 | .. | 5 20 | .. |
| Holborn Viaduct .... ,, | .. | .. | .. | .. |
| Blackfriars ..... ,, | .. | .. | .. | .. |
| Bromley South ..... ,, | 5 12 | .. | 5 39 | .. |
| Swanley ..... ,, | 5 22 | .. | 5 52 | .. |
| Orpington ..... dep | .. | 5 25 | .. | 5 49 |
| Sevenoaks ..... ,, | .. | 5 50 | .. | 6 10 |
| Hildenborough ..... ,, | .. | 5 59 | .. | 6 19 |
| 40 East Croydon ..... dep | .. | 4 46 | .. | .. |
| 40 Redhill ..... ,, | .. | 5 5 | .. | .. |
| Tonbridge ..... dep | .. | 6 20 | .. | 6 28 |
| Paddock Wood ..... ,, | .. | 6 28 | .. | .. |
| Marden ..... ,, | .. | .. | .. | .. |
| Staplehurst ..... ,, | .. | .. | .. | .. |
| Headcorn ..... ,, | .. | .. | .. | .. |
| Pluckley ..... ,, | .. | .. | .. | .. |
| Maidstone East ... { arr | 5 54 | .. | 6 20 | .. |
| Maidstone East ... { dep | 5 58 | .. | 6 32 | .. |
| Bearsted and Thurnham ..... | 6 4 | .. | 6 42 | .. |
| Hollingbourne ..... | 6 9 | .. | 6 46 | .. |
| Harrietsham ..... | 6 14 | .. | 6 52 | .. |
| Lenham ..... | 6 19 | .. | 6 57 | .. |
| Charing ..... [well | 6 26 | .. | 7 4 | .. |
| Hothfield Halt, for West- | .. | .. | 7 10 | .. |
| Ashford (Kent) ..... arr | 6 37 | .. | 7 17 | .. |
| Ashford (Kent) ..... dep | 6 41 | .. | .. | .. |
| Wye ..... | 6 51 | .. | .. | .. |
| Chilham ..... | 7 0 | .. | .. | .. |
| Chartham ..... | 7 8 | .. | .. | .. |
| Canterbury West A .... | 7 12 | .. | .. | .. |

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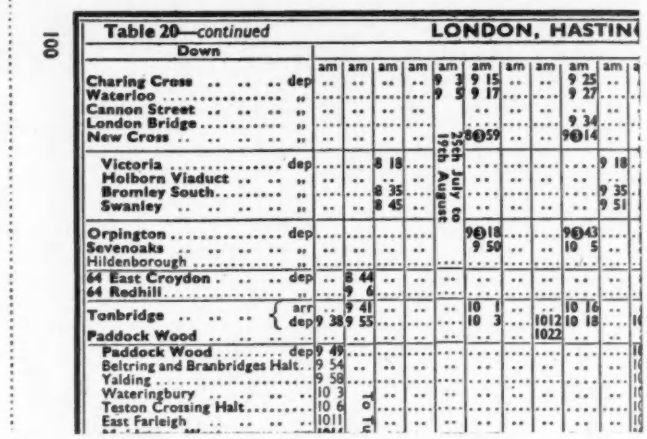
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Table 20—continued LONDON, HASTIN

Down

| | am | am | am | am | am | am | am | am | am | a |
|---|---|---|---|---|---|---|---|---|---|---|
| Charing Cross .. .. .. dep | .. | .. | .. | .. | 9 3 | 9 15 | .. | .. | 9 25 | .. |
| Waterloo ..... ,, | .. | .. | .. | .. | 9 | 9 17 | .. | .. | 9 27 | .. |
| Cannon Street .. .. .. ,, | .. | .. | .. | .. | | .. | .. | .. | .. | .. |
| London Bridge ..... ,, | .. | .. | .. | .. | | .. | .. | .. | 9 34 | .. |
| New Cross .. .. .. .. ,, | .. | .. | .. | .. | | 8 59 | .. | .. | 9 14 | .. |
| Victoria ..... dep | .. | .. | 8 18 | .. | | .. | .. | .. | .. | 9 18 |
| Holborn Viaduct .. .. ,, | .. | .. | .. | .. | | .. | .. | .. | .. | .. |
| Bromley South ..... ,, | .. | .. | 8 35 | .. | | .. | .. | .. | .. | 9 35 |
| Swanley .. .. .. .. ,, | .. | .. | 8 45 | .. | | .. | .. | .. | .. | 9 51 |
| Orpington ..... dep | .. | .. | .. | .. | | 9 18 | .. | .. | 9 43 | .. |
| Sevenoaks .. .. .. .. ,, | .. | .. | .. | .. | | 9 50 | .. | .. | 10 5 | .. |
| Hildenborough ..... ,, | .. | .. | .. | .. | | .. | .. | .. | .. | .. |
| 64 East Croydon .. .. dep | .. | 8 44 | .. | .. | | .. | .. | .. | .. | .. |
| 64 Redhill ..... ,, | .. | 9 6 | .. | .. | | .. | .. | .. | .. | .. |
| Tonbridge .. .. .. { arr | .. | 9 41 | .. | .. | | 10 1 | .. | .. | 10 16 | .. |
| Tonbridge .. .. .. { dep | 9 38 | 9 55 | .. | .. | | 10 3 | .. | 10 12 | 10 18 | .. |
| Paddock Wood .. .. .. | .. | .. | .. | .. | | .. | .. | 10 22 | .. | .. |
| Paddock Wood ..... dep | 9 49 | .. | .. | .. | | .. | .. | .. | .. | .. |
| Beltring and Branbridges Halt. | 9 54 | .. | .. | .. | | .. | .. | .. | .. | .. |
| Yalding ..... | 9 58 | .. | .. | .. | | .. | .. | .. | .. | .. |
| Wateringbury .. .. .. | 10 3 | To | .. | .. | | .. | .. | .. | .. | .. |
| Teston Crossing Halt ..... | 10 6 | T.C. | .. | .. | | .. | .. | .. | .. | .. |
| East Farleigh .. .. .. | 1011 | | .. | .. | | .. | .. | .. | .. | .. |

25th July to 19th August

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13

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## timetables

Timetables, perhaps the most important of the railways' printed matter, are the responsibility of a special committee which includes the regional traffic superintendents but does not represent the publicity officers.
Strictly speaking, timetables are not publicity matter, but purely functional pieces of print, and they have been treated as such by most countries.

**11** and **12** *From the commencement of this year's summer schedules, all British Railways timetables are now produced in standard, large format. Compared with the old ones the new editions have a larger page size which allows for a clearer layout. They also use a different typeface; the combination of Gill medium and bold is easy to read and makes identification of important stations simple. Sections of the old timetable,* **11**, *and the new one,* **12**, *are reproduced here same size.*

**13** *The spread is from an international timetable published by the Information Centre of European Railways (an international organisation founded in* 1950), *and is a striking combination of imagination and simplicity.*

**14** *This timetable for the French National Railways makes an interesting comparison with the British example. Here again a sans serif type is used, because such faces are the most legible in very small sizes.*

## end of railway feature



*Design: Number* 81

# FURNITURE SURVEY

## *Occasional furniture*

A. GARDNER-MEDWIN

**The following groups of furniture are included in the survey**

*Fully upholstered chairs* MARCH
*Dining tables and chairs* APRIL
*Upholstered occasional chairs* MAY
*Bedroom furniture* JUNE
*All-purpose chairs* JULY
*Storage units* AUGUST
*Outdoor furniture* OCTOBER
*Kitchen furniture* NOVEMBER

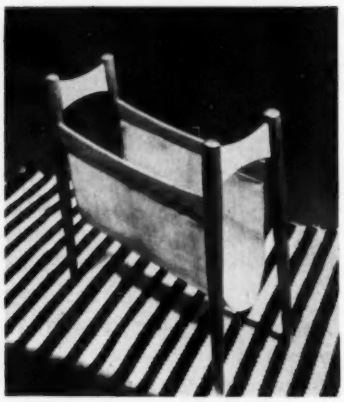
*One of a series of articles on modern furniture selected from 'Design Review', the illustrated record of current British products to be seen at the London headquarters of the Council of Industrial Design.*

FROM THE EARLIEST DAYS occasional furniture has offered an opportunity for originality, and sometimes ingenuity, to designers. A seventeenth century barley-twist table, an eighteenth century finely carved fret tea-table, a late eighteenth century decorated satinwood sofa table, a Regency ormolu grille cupboard, or a papier mâché Victorian sewing table, are some of the more obvious examples of designers' and cabinet makers' skill in the past. Can we find the same inventiveness and originality in occasional furniture today?

The illustrations represent a variety of occasional furniture which has been accepted by 'Design Review', and the examples selected show that this type of furniture is often a reflection of developing fashions and styles. For instance, metal rod, brass, plastics, cord and wire are post-war materials that were accepted first of all by more sophisticated people, but are now tolerated by a larger public. Other factors which influence the design of furniture are new inventions

BELOW *Occasional table with white 'Warerite' top and a photographic design of a black magnolia leaf laminated on the surface. Edging and base of brass.*
DESIGNER and MAKER Philip Pound Ltd.

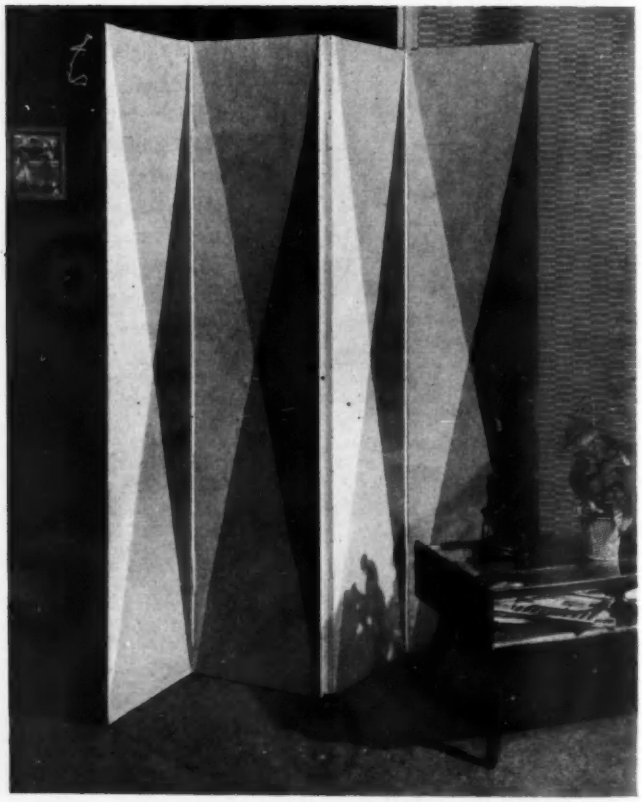
BELOW *Plant table of rauli with inlaid strips of boxwood; legs of turned mahogany. Satin brass drawer handles enable the drawer to be used from either side. Wood dowelled pot holder on wire tray.*
DESIGNER Geoffrey Dunn.
MAKER Dunn's of Bromley.



ABOVE *Magazine rack in mahogany and beech with grass cloth cradle.*
DESIGNER Peter Brunn.
MAKER Peter Brunn Workshops.

and changing interests and habits. Hence the plant table and the large sales of plant pot holders, which result from the recent interest in indoor plants, and tables, chairs, trays and lamps which have been affected by the introduction of television.

If occasional furniture has been scarce since the war, this is due largely to the effect of the 'Utility' scheme which did not cater for less necessary pieces. In the case of tables and bookcases economy of materials was important, and therefore more decorative pieces were hard to sell owing to the high purchase tax they carried. No examples are shown here of the 'make-it-yourself' occasional furniture sold direct by the makers to the public. This furniture is becoming popular because of its cheapness and, in some cases, because of its adaptability for various purposes: several of these designs are ingenious and attractive, and it is interesting to see how many incorporate metal and plywood. On the whole, occasional furniture is not expensive, and this is one of the reasons why there is, and should be, more experimental and imaginative design in this type of furniture than in most others. A touch of eccentricity in the form of a small table or a plant stand in a room is more easily accepted by the public than, for example, a bed made of steel rod and cord – so perhaps we should think of occasional furniture as the safety valve for designers and public alike.

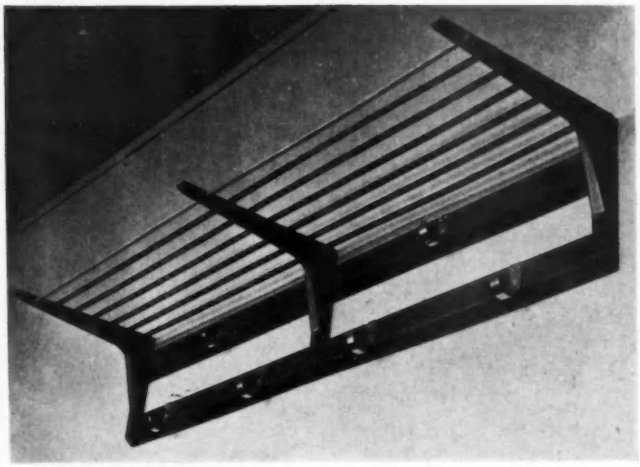


RIGHT *Draught screen covered in cotton casement cloth in a three colour combination.*
DESIGNER Herbert Berry.
MAKER Green Brothers.

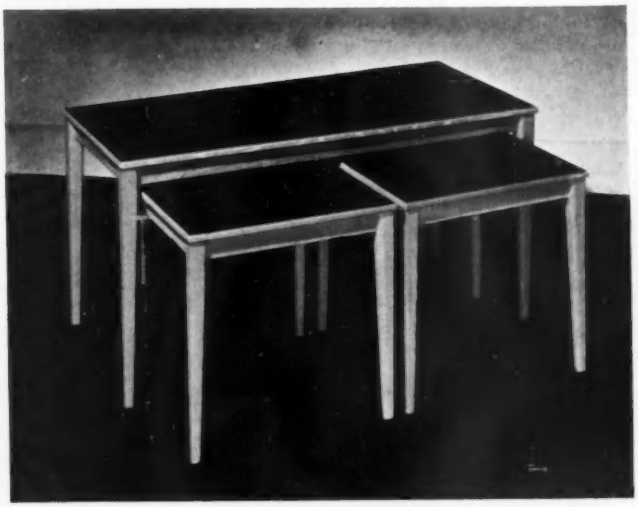
LEFT *Sewing table in natural mahogany with a sliding top and a loose tray.*
DESIGNER Ward and Austin.
MAKER Primavera (London) Ltd.

LEFT *Plant pot holder of metal rod finished black or cream. Terracotta pot.*
DESIGNER Terence Conran.
MAKER Conran Furniture.

BELOW *Hat and coat rack in rauli with birch dowel rack.*
DESIGNER Molly Benham.
MAKER Dunn's of Bromley.



ABOVE *Tea trolley with walnut trays and beech frame.*
DESIGNER P. K. Bridson.
MAKER Kandya Ltd.

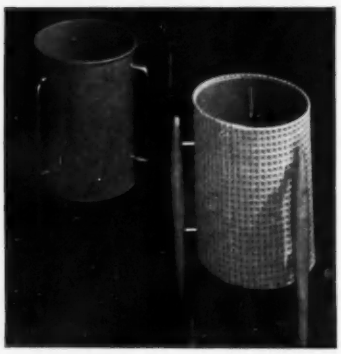


RIGHT *Nest of tables in mahogany; plywood top veneered with rosewood.*
DESIGNER W. H. Russell.
MAKER Gordon Russell Ltd.

LEFT *Trolley table in sapele (walnut or oak also available), with beech frame.*
DESIGNER Peter Hayward.
MAKER W. G. Evans & Sons Ltd.

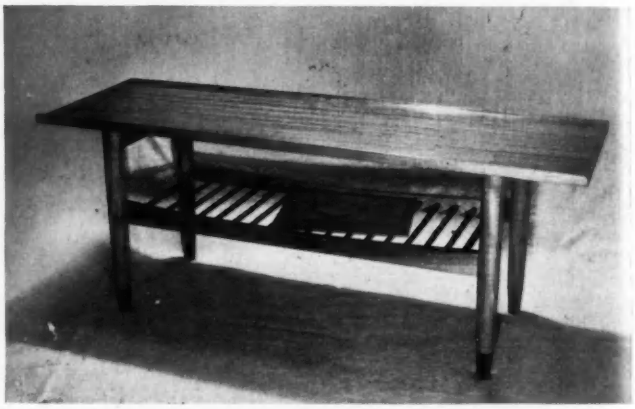
LEFT, BELOW *Three cornered stools with foam rubber seats and beech legs.*
DESIGNER Howard B. Keith.
MAKER H. K. Furniture Ltd.

BELOW *Occasional table with magazine rack of natural mahogany. Leg tips polished black.* DESIGNER Herbert Berry. MAKER Herbert Berry Associates.



ABOVE *Wastepaper tubs of metal with painted steel, brass or wood legs.*
DESIGNER and MAKER F. J. Willner.

BELOW *Bookcase in natural oak with sliding glass doors.*
DESIGNER and MAKER Ian Audsley.



ABOVE *Occasional table in natural mahogany with reversible top and 'Formica' on one side.*
DESIGNER Jacques Groag.
MAKER Loughborough Cabinet Manufacturing Co.

# NEWS

## COMPETITIONS

### Competition for Clock Exhibition

An opportunity for artists or draughtsmen to have a clock made to their own designs is offered by the British Clock and Watch Manufacturers' Association. Competitors are in three age groups – from 10 years to 13 years; from 14 years to 17 years; and 17 years upwards. The designs include all types of domestic clocks, but exclude grandfather, grandmother and alarm clocks. The winners of each section will have the clock made according to their own ideas by one of Britain's leading manufacturers. The design remains the copyright of the designer, who may, after the exhibition, dispose of it to a manufacturer for production purposes. Competitors should state the size of the clock they design (which must accommodate a 3½ inch movement), and the materials to be used. Competitors should give their age, name, address, school, academy, industry, vocation or profession along with their entry. This should be sent to The Secretary, British Horological Institute, 35 Northampton Square, London EC1, and must be received not later than September 23. Winning designs will be shown at the 'Five Centuries of British Timekeeping' Exhibition at the Goldsmith's Hall, October 3–8.

### Slazenger golf trophy

*This trophy was recently awarded to the winner of the National Close Championship. This is the first time such an award has been made, and its object is to encourage British professionals to compete; £2,500 are awarded in prizes, and the trophy is kept for one year by the winner. The trophy is a flagon made from 4 oz of gold and 80 oz of silver, and was designed by G. Benney who was commissioned by T. Booth Waddicor and Partners Ltd.*

### Modern department for tailoring

*The new 'Bespoke Tailoring Department' at Austin Reed, Regent Street, is the latest demonstration by this firm of a long-standing faith in modern design as a fundamental aspect of its sales policy. Converted from a sixth floor storeroom, the designers have made the most of an awkward site. False walls obscure the existing windows which emerge from the floor below, though the circular windows have cleverly been given special emphasis. Display fittings are excellent and the chairs, designed by Sigvard Bernadotte for the Danish firm of France & Daverkosen, lend a quiet distinction. At the head of the stairs is a mural by Dennis Bailey. Architects, Westwood Sons & Harrison.*

### Poster competition

As part of their programme for the British Exhibition at Copenhagen from September 29–October 16, the joint organisers, the British Import Union of Denmark and the Federation of British Industries' subsidiary, British Overseas Fairs Ltd, are promoting a poster competition in the grounds of Tivoli Gardens, one of the two centres of the exhibition. The competition is open to all national advertisers in Great Britain, and entrants are invited to supply, for display, double crown posters at a charge of two guineas for each, the necessary boards for exhibition and other equipment being provided by the organisers. The number of entries from any one organisation will be limited to four, involving a maximum fee of eight guineas. For posters larger than double crown size competitors will be asked to provide their own boards, but owing to the nature of the display, it is unlikely that any larger than double royal will be accepted. Judging for awards will be carried out by a committee of the Danish Advertising Association, which is collaborating in the promotion of the competition, and which is holding a special luncheon during the exhibition for 200 of their members at which there will be a secret ballot. Posters need not conform to modern design. Examples of earlier work would be welcome to add variety, and any posters from before the 1914–18 War will be displayed free of charge. Applications should be made by September 7 to British Overseas Fairs Ltd, 21 Tothill Street, London SW1.

### Carpet design – Shop display

'Carpet Review' in association with the British Carpet Promotion Council, is holding a window display competition during 'Carpet Fortnight' (October 1–15) The competition will be divided into two groups – for stores employing full-time staff and for those not doing so. In each group, prizes of 50, 25 and 10 guineas are offered. The 'Carpet Review's' challenge trophy will be awarded to the best display in either group. The displays will be judged from photographs, which must be accompanied by an entry form, obtainable from 'Carpet Review', 22 Strand, London WC2. The closing date is October 22.

The magazine 'Stores and Shops' is sponsoring a competition for the best window or interior display in retail stores during the Wool Fashion Festival, from September 5–17. There will be two classes of entry with a first and second prize in each class of £75 and £25 respectively. Entries should reach the Editor, 'Stores and Shops', 68 Welbeck Street, London W1, by September 30.

### R S A Bursaries

Bursaries valued at £2,600 are offered by the R S A in a competition for the design of domestic electrical appliances and many other articles. Further details may be obtained from the offices of the society in John Adam Street, Adelphi, WC2.

## COURSES & CONFERENCES

### Quest for colour

The fourteenth Designers' Conference of the British Colour Council's Interior Decoration and Design Division will be held at Oriel College, Oxford, from September 12–16. The President of the British Colour Council, Sir Ernest Goodale, and the Chairman H. G. Dowling, will be present at the beginning of the course. 'Quest for Colour', the theme introduced at the Spring Conference held in London at the British Colour Council Headquarters, will be continued in Oxford. The speakers include Graham Webster, John Farleigh, Robert F. Wilson, Maurice Wheatley,

Jane B. Drew, and E. Maxwell Fry. Besides lectures, the programme will include visits and discussions for the delegates, who are drawn from British designers and colourists and represent a cross section of the industries concerned with manufacturing for interior decoration.

## Course on furnishing

The L C C Technical College for the Furnishing Trades at Shoreditch is arranging a new full-time course in upholstery and soft furnishing, including interior decoration. The course is intended for boys and girls who wish to achieve positions of responsibility, either on the upholstery (manufacturing) side, or in connection with soft furnishings on the retail side, including workroom processes.

## Furniture course

An advanced course in 'Furniture Design and Construction' has been drafted by the Regional Advisory Council for Higher Technological Education and is to be offered at several technical colleges in London and the Home Counties in September. The course will lead to an advanced certificate which will form a qualification of national repute. Work is in progress on advanced courses on 'Machines, tools and processes', 'Materials', and 'Management'.

## R S A Oration

The annual oration of the Faculty of Royal Designers for Industry will be given this year at the headquarters of the R S A by Milner Gray, the new Master of the Faculty. Date to be announced.

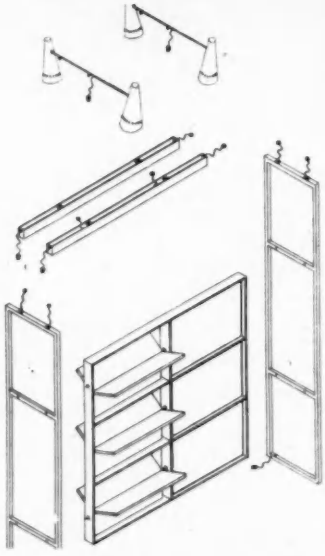
# PUBLICATIONS

## Filmstrip on American furniture

The latest addition to The British Rubber Development Board's series of educational filmstrips is entitled 'Latex Foam in American Furniture'. It is issued with a frame by frame commentary, in booklet form, by Dennis Young, the furniture designer. This is the third filmstrip dealing with furniture. The first and second are entitled 'Latex Foam for Furniture' – showing various stages in the manufacture of foam and its use in modern furniture, and 'Upholstering with Latex Foam' – a more specialised strip showing upholstery techniques. The filmstrips are obtainable at 3s each, which includes the lecture notes, from The British Rubber Development Board, Market Buildings, Mark Lane, London EC3.

## Publications received

Those who produce or read catalogues, leaflets or working instruction sheets issued by manufacturers may be interested in British Standard 1311 – 'Sizes of manufacturers' trade and technical literature (including recommendations for contents of catalogues)', which was recently published by the British Standards Institution. As the foreword points out, the wide range of sizes in which pamphlets and catalogues are produced by firms often gives much annoyance and inconvenience to the recipients. Working instruction sheets cannot be bound together, and the variety of sizes and shapes makes tidy filing on shelves impossible. The heterogeneous pile of papers that collects in any editor's office is ample testimony to the cogency of this argument, and in general the really small booklet is more annoying than the larger sort. Amongst the publications received in this office is 'The forming of aluminium sheet' by H. Hinxman, a booklet published by the Northern Aluminium Co Ltd. It is of decent size and should receive the approval of the student of British Standards. Of almost identical shape is a series of well produced booklets on Titanium Pigments and Oxides by British Titan Products Ltd. Other publications received come from The General Electric Co Ltd, The English Electric Co Ltd, British Cellophane Ltd, Taylor Woodrow Ltd, the British Film Institute, Her Majesty's Stationery Office and The Illuminating Engineering Society. We have also received two quarterlies which are as different in shape as in character, the Shop Review and the Stock Exchange Journal.



## Portable exhibitions

*There is an increasing demand for small portable exhibitions which can be erected and dismantled with a minimum of skilled labour. In recent years several interesting solutions to the problems involved have been seen, and the one illustrated here seems to be one of the most successful. It was designed by Ian Bradbury for British Geon Ltd, and was originally made for use in the 'International Plastics Exhibition' in Oslo.*

*The units consist basically of display panels which are fixed by means of studs and slots to open vertical frames, which in turn are held together by channels across the top. These channels also carry the lights and wiring. The equipment is suitable for use on sites of varying shapes as the panels in their bays can be arranged in various positions relative to one another.*

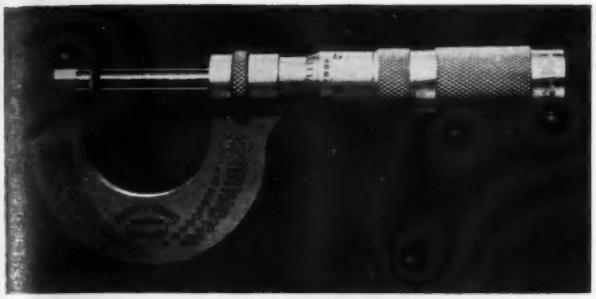
*In displays of this kind damage frequently occurs during dismantling and transit, and the light fittings in this case appear to be rather vulnerable unless specially packed in fitted cases, but this is a small criticism of an ingenious solution to a difficult problem.*

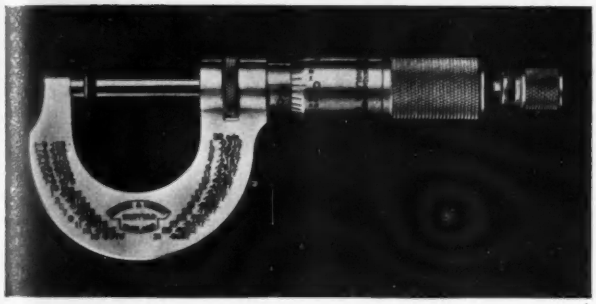
*P.I.F.*

*Sketch showing the units required for one bay indicating the method by which they are assembled.*

## House journals

In the National House Journal Competition for 1955 organised by the British Association of Industrial Editors, the award of excellence was given to the Shell Magazine. R. S. Hutchings, who judged design and layout, observed that the standard of design and layout of the many entries submitted covered a very wide range of quality, but that the number of outstandingly good entries far exceeded those at the other end of the scale. "What surprised me most was the number of entries which could have been right up at the top with just a little closer attention to the details of typography such as the leading and word spacing of display lines and the decent fitting of drop initials to the text." Mr Hutchings pointed out that more entries suffered from excessive and insensitive use of colour than from lack of colour. Indeed the majority of those with second and additional colours lost points by using them, and the number using colour with discretion and wholly satisfactory results was a mere handful. The colours chosen were also often unsatisfactory – too many were harsh shades, too dark for the purpose and disruptive of the layout. "In general there is a prevailing tendency





## A better micrometer

Moore & Wright of Sheffield has recently brought out the 961Y micrometer, above, which incorporates features not found on the earlier model. Designed for quick, easy and accurate hand use, the improved version has a smoother appearance and the ratchet is built into the upper part of the thimble. Correct pressure is always applied when using the ratchet stop, ensuring accurate readings especially on repetitive measurements. A knurled collar on the lower part of the thimble gives direct feel if required, and can be easily worked by one hand.

The new micrometer is pearl chrome plated, has a one-piece hardened and thread ground spindle, and an adjustable graduated sleeve. The diameter of the thimble is $\frac{5}{16}$ inch and the capacity of the instrument $\frac{1}{10}$ inch. The new ratchet stop can be supplied on other Moore & Wright external micrometers having larger capacities, with thimbles of $\frac{5}{16}$ inch.

over-crowd, not only in display composition but also in text matter, which could often be leaded to great advantage."

In addition to holding this competition, the British Association of Industrial Editors is preparing a directory of house journals in this country for publication this year. Price and date of publication will be announced later. The new directory, the first to be issued in this country, is therefore expected to have a wide circulation. There is still time for further entries to be included, and editors who have not already done so are asked to send particulars of their house journals to E. W. Sharp, Editor, 'The Holding Component', c/o L. H. Newton and Co Ltd, Nechells, Birmingham 7. Entries will be inserted free of charge. The directory will carry advertisements, and rates can be obtained from Edward Mortimer Ltd, Pellon Lane, Halifax, Yorks.

### Crafts exhibition

An exhibition representative of the fine crafts is to begin on September 30 at Acheson House, Edinburgh. Organised by the Craft Centre, the exhibition will, after a fortnight in Edinburgh, travel in various parts of Scotland for three months, and in England for a further three months. Some of the activities of this organisation are described in a booklet published by the Scottish Craft Centre and designed by Gordon F. Huntly.

## MISCELLANEOUS

### Master of Royal Designers

The distinction of R D I was established in 1936 by the Royal Society of Arts as the highest honour to be obtained by eminent industrial designers. The number of living recipients is limited to 40, and there are now 39, excluding eight honorary awards held by foreign designers.

The newly elected Master of the Faculty of Royal Designers for Industry is Milner Gray, who succeeds Sir Francis Meynell and who will hold office for two years. Born in 1899, Mr Gray received his art training at the Goldsmith's College School of Art. He is one of the two senior partners in Design Research Unit, a firm of architects and designers with offices in London and Dublin. He is a Fellow and Founder Member of the Society of Industrial Artists of which he was President from 1943 to 1948. In 1940 he formed and was head of the Exhibitions Branch of the Ministry of Information and was subsequently Principal Design Adviser on Exhibitions. From 1937 to 1940 he was Principal of the Sir John Cass School of Arts and Crafts and has held teaching appointments in several other London schools. He has been the Board of Trade representative on the Governors of the London Central School of Art and a member of the National Advisory Committee on Art Examinations of the Ministry of Education. He was principal designer of the 'Design at Home' exhibition in 1945 and of the 'Design at Work' exhibition at the Royal Academy in 1948. He was responsible for the signposting of the South Bank at the Festival of Britain, and his engraved glass screen for the Royal Box can be seen at the Royal Festival Hall. He was appointed a Royal Designer for Industry in 1938 for his work in the field of package design.

### Art for Newcastle

Art is seldom associated with Newcastle. It is therefore the more gratifying to learn that following recent expansions in their studios, Doig Bros & Co Ltd, the Newcastle upon Tyne printers, who have long laid emphasis on their unique design facilities, recently appointed Mr Edwin John Straker as Art Director. This remarkable appointment was brought about by the success of the firm s 'design for print' policy with which Mr Straker will be mainly concerned. Before joining Doig's, Mr Straker was on the staff of the Newcastle College of Art and Industrial Design as head of the Commercial Art Department. From 1947 to 1953 he was lecturer in commercial art and display at King's College, University of Durham. His appointment there was the first of its kind in a British university. During those six years he earned the respect of the advertising profession, not only for the quality of the graduates he trained but also for his own free-lance work. Mr Straker's early training was first in the Commercial Art Department and then the Planning Department of Camberwell School of Arts and Crafts in London. After war service with the Merchant Navy he returned there as a visiting lecturer and also practised as a mural painter, decorator and designer.

### Turnstile mechanism

What is claimed to be the simplest multi-coin mechanism yet developed for turnstiles has been patented by Sir W. H. Bailey & Co Ltd (Albion Works, Patricroft, Lancs). It has only two moving parts, so that trouble-free operation is ensured and maintenance is reduced to the simplest routine. A spring loaded plunger – operated by the movement of the turnstile arms – is normally in the locked position but is freed by the insertion of a coin of the appropriate size. The correct coin falls into the slot in the centre of the mechanism and acts as a key when the plunger is pushed forward. The coin is forced against a projection on the locking lever which lifts it out of the locked position, so permitting the plunger to travel forward and allowing the coin to fall through a slot in the bedplate. The device immediately returns to the locked position, under the action of the spring, when pressure on the plunger is released.

### New theatre project

The New Theatre Committee of the Questors Theatre has recently launched an appeal for money to build an adaptable theatre. The need for such a theatre is obvious when we reflect on the variety of plays which the modern public enjoys. Each age, from Euripides to Ibsen, evolved a theatre suited to its own dramatic conventions, and one has only to compare the semi-circular Greek theatre with the rectangular type of the last 100 years to realise that a play intended for the one could not

be performed in the other. The solution to the problem is an adaptable theatre, and it is calculated that the cost of this project would be covered by 3,500 people each donating 21s a year under seven-year covenants. Donations should be sent to the Questors Theatre, Mattock Lane, Ealing, London W5.

## 'Pyrex' glass development

John Purser-Hope, Managing Director of James A. Jobling & Co Ltd of Sunderland, has announced the appointment of Milner Gray of D R U as design consultant. Milner Gray will work in close collaboration with the Jobling's design team headed by John Cochrane.

Heating panels of 'Pyrex' glass may replace the wire element in electric fires of the future and experiments are taking place on this subject at the laboratories of James A. Jobling & Co Ltd of Sunderland. Efforts to produce a glass to radiate electric heat have been in progress for some time. The 'Panel Fire' of the future will have no wires to burn out. The exposed heater will be completely insulated and, strangely enough, the side of the glass panel insulated from the current will be the one radiating most of the heat. All the panels will be transparent.

## P V C for car hood

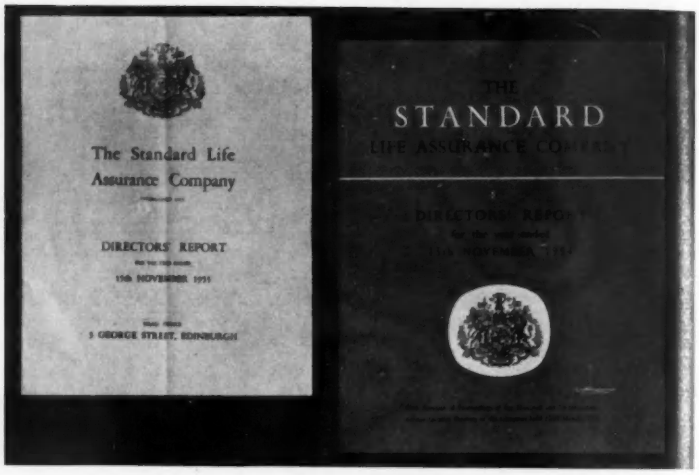
The use of polyvinyl chloride (P V C) materials in the motor industry is increasing, partly because of their high resistance to wear and tear and exposure, and the ease with which they are cleaned. A case in point is the hood of the David Brown Aston Martin DB 2-4 drop-head coupé, which is constructed of P V C leathercloth made by British Geon Ltd.

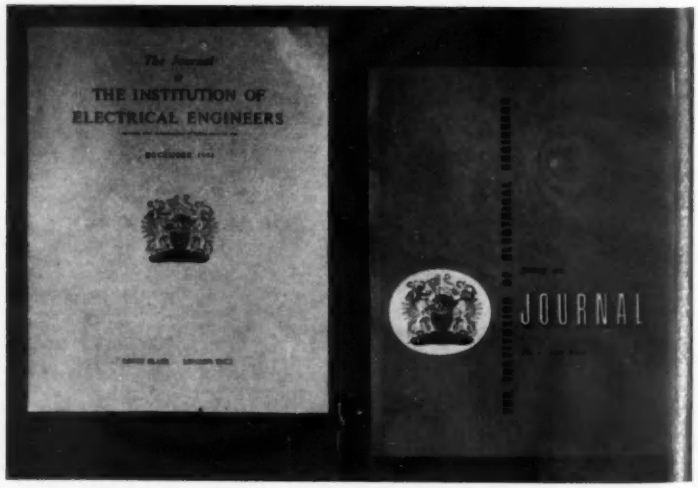
## Furniture showrooms

Due to the expansion of Morris of Glasgow's business in England, new showrooms were recently opened at 1 Heddon Street, Regent Street, W1. They will be used for trade customers and for handling contract work. The designers were Richard Levin and Jonathan Green.

## New president

Clive Barwell has been elected President of the Incorporated Advertising Managers' Association. Mr Barwell became a member of the association in 1938. He is also General Publicity Manager of Mullard Ltd which he joined in 1933.






## New faces for old journals

*In redesigning the 'Furniture Record', centre, Stuart Rose, who was recommended for the job by the CoID through its Record of Designers, put to advantage the enlarged page size and finer quality paper that are features of this journal. Instead of the fussy format of the old issue, a simpler, more colourful and more dignified cover and title page now appear. Equal credit must be given to the Standard Life Assurance Co for its new annual report, top, which was designed by John Haddon & Co Ltd and which now presents its information in a more authoritative manner. The new design by William Stobbs for the Journal of the Institution of Electrical Engineers, on the other hand, represents a change of heart. Instead of a mere reference booklet, this journal now contains readable articles which, besides appealing to the whole membership of the Institution, will find a public outside it.*

# BOOKS

**Industrial Design,** *Harold Van Doren, McGraw-Hill Book Co, Inc, 1954, New York,* $6.50; *Alec Tiranti Ltd, London,* 49s

This second edition of Van Doren's book is said to offer a "completely 'how to do it' approach to the problem of product design and development". It is a brave man who would attempt such a task, and despite Van Doren's sincerity, the result is a little confusing. Where the book is concerned with facts and how to obtain information, it is particularly good, but where it concerns itself with analysis of form and shape – the art side – there are grounds for criticism. The book is mainly about American industry and describes in detail the methods of conducting consumer research and how the information influences the design of the product. There is practically no mention of the work done in Europe, which gives an impression of isolationism in design. To the student there is much valuable information about methods and procedure in industry and to those concerned with education the realism of the approach is to be commended. There are moments of humility and fundamental commonsense that give the book a warm human touch, especially the chapter on how to approach the client. Here, nothing is left to chance and the submission of designs is well planned and rehearsed to make sure the client applauds at the final curtain. There are really two books; one on design administration and industrial techniques and the other devoted to basic design instruction, but the amalgamation is not very successful. The first has its value and would be more or less complete in itself, but to include art instruction is neither desirable nor necessary. Van Doren admits that the designer can become too practical, and that a manufacturer employs a designer because he wants "fresh and untrammelled thinking", suggesting that over-specialisation may lead to a limited outlook in a particular industry. His attitude is based on that of the consultant designer and his staff, and describes the kind of organisation that exists in America. It is the author's opinion that the profession of industrial design will always remain a limited professional activity, but at the moment it is one of the least crowded of the professions. He admits that the training now available in America is not entirely satisfactory, but should improve as more experienced teaching staff is employed. This is a useful book if studied discriminately, but without guidance its effect may limit rather than stimulate the outlook of the student. ROBERT CANTOR

**Industrial Design in Germany,** *Zentralstelle zur Förderung Deutscher Wertarbeit, Verlag GmBH, Düsseldorf,* DM 16,80

'Industrial Design in Germany' is a pictorial record of the Hanover German Industries Fair, 1954, and is a sample of the competition we have to face in all types of industry. This is not intended to be a book of new ideas: the examples have been chosen from normal commercial sources to form part of a permanent collection of good design. The best section is the tableware. We are already familiar with much of the Rosenthal pottery and the stainless steel, glass and pottery designs of Professor Wagenfeld. There seem to be others just as good.

Most of the straight engineering is clean and pleasant, but some appalling examples have been included, which raise doubts about the standards adopted for selection. Much of the domestic electric design is bad American, and three sewing machines, fully styled, make the old Jones and Singer patterns look models of refinement. Even in Germany there seems to be the usual confusion of thought about the nature of design for appearance. An excellent photograph of a circular milling cutter is shown. Its appearance is entirely due to technical requirements – not to the thought of a designer. That its shape is beautiful is an accident, and in my opinion cutters, calipers, precision tools and the like, which owe their shape to their function, and their beauty to the photographer's skill, should be separated from consciously designed objects and exhibited as educational examples of good form. The trilingual text suggests that German industry takes design as a sales factor very seriously. DOUGLAS SCOTT

**The Happy Home, a Universal Guide to Household Management,** *compiled by Good Housekeeping, Grosvenor Press,* 30s

The sub-title is scarcely a happy one, for this encyclopaedia has been compiled on behalf of the Gas Council and so, not unnaturally, electricity gets a poor showing. Nowhere on dust-jacket or title-page is the electrically minded housewife warned of this. But, this criticism apart, the book is most comprehensive, covering all usual aspects of housewifery, plus – perhaps too ambitious a programme, this – marriage, parenthood, health and beauty. All information is arranged for easy reference and is, within the limits of 370 large pages, as thorough as it is sound. Layout and photographs, which include 32 colour pages, are of a high standard for this type of book. Only tacitly is there any guidance on design in the home, however. Though photographs almost invariably show modern furnishings – or at least nothing that would make the average DESIGN reader wince – the text makes no comment on the choice of furniture, fabrics and so forth, by either aesthetic or quality standards. Shopping is now a complex science, yet is not a subject in any housecraft curriculum, so it is a pity that this household encyclopaedia (a form of much needed adult education) does not help to fill the gap. ELIZABETH GUNDREY

**Liberal education in a technical age,** *a survey published for the National Institute of Adult Education, Max Parrish and Co Ltd,* 6s

The terms of reference given to the committee which conducted this survey were to inquire into the relationship between the vocational and non-vocational elements in further education and training, and researches included such establishments as technical colleges, polytechnics, colleges of art, further education, and commerce, and evening institutes and extra-mural classes.

That section of the survey dealing with technical institutions and colleges of art is of particular interest – of the 91 principals who replied to the questionnaire (of a total of 226), all but seven were prepared to accept responsibility for developing 'liberal interests and outlook' in their students. Few of the institutions appeared to take any positive steps to implement that responsibility.

Oddly enough 'design', like 'English', was regarded by both authors and principals as a non-vocational or liberal subject for all technical students (including building and woodworking apprentices). Moreover, design appears to be synonymous in the authors' minds with craftwork, for they speak of the value of doing, and of 'creating, under guidance, a well designed object, whether it be a tool or a chair'.

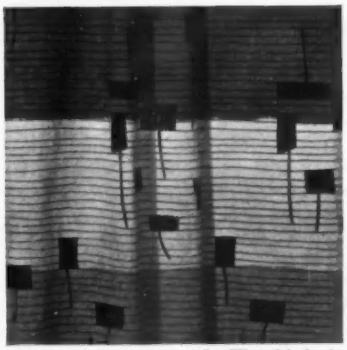
If questions of design and design appreciation are really considered as being outside the vocational training of students whose work will be concerned with the production of objects for everyday use, then it is scarcely surprising that public standards of taste in this country are no higher. Circumspice. S.F.

**Golden Milestone,** *Fifty Years of the A A, edited by David Keir and Bryan Morgan; produced by Newman Neame Ltd for the Automobile Association,* 15s

The Automobile Association is one of those curious English bodies that has grown into a vast organisation because the official mind declined to accept the implications of an invention which was revolutionising our lives. The wrapper of this Golden Jubilee volume claims its growth "from a band of rebels to an organisation almost as important as the Post Office", and if this is pitching it rather high, certainly it is difficult to imagine our island roads without the A A, were it not for the fact that there exists (still more curiously) its rival the R A C. One of the 'good works' of the A A is its emergency signposting, in which it has commonly anticipated the public highways authorities. It is unfortunate that amongst its many officials it never seems to have employed a typographer or designer of signs, a failing which seems to be common to similar societies throughout the world. A couple of colour plates devoted to the badges of the world's motoring organisations display almost every distortion to letter and symbol which misplaced ingenuity could devise. I should add that at its price this volume, which can well be described as 'sumptuously illustrated', is virtually a gift. NOEL CARRINGTON

## Corrections

DESIGN July page 12. The unfinished building next to the South East Face passenger building at London Airport is not intended for the longhaul services to the U S A and Far East as stated, but will be used for such services as crew briefing and clearance, customs, and on its upper floors, restaurants and other accommodation for the public visiting the airport.



DESIGN August page 18. The fabric by Lucienne Day for Heal & Son Ltd called 'Triad' was inadvertently reversed. We reproduce it above in its correct position.

## Designers in this issue

Ian Audsley, MSIA (50). Dennis Bailey, ARCA (51). Molly Benham (49). G. Benney, desRCA (51). Sigvard Bernadotte (51). Herbert Berry, MSIA (48, 50). Allen-Bowden Ltd (18). Ian Bradbery, MSIA (52). P. K. Bridson (49). Peter Brunn, MSIA (48). Terance Conran (49). Geoffrey Dunn (48). Kenneth Garland (Art Editor). Jonathan Green (54). Milner Gray, RDI, FSIA (52, 53, 54). Jacques Groag, FSIA (50). Charles Hasler, MSIA (43). Peter Hayward, MSIA (50). F. H. K. Henrion, MBE, FSIA (cover). Howard B. Keith, MSIA (50). R. Lander, MSIA (43). Kenny Lee (45). Richard Levin, OBE, MSIA (54). Alastair Mechie, MSIA (45). Gordon Nicoli, (45). Stuart Rose, MSIA (54). W. H. Russell, FSIA (49). William Stobbs, MA, MSIA (54). Edwin John Straker (53). Ward & Austin (49). F. J. Willner (50).

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